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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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420
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960
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1080

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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		20						25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
		35					40					45			
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Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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Val	Leu	Ser	His	Thr	Pro	Asp	Gly	Ala	Thr	Gln	Thr	Ile	Ala	Trp	Val
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Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
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  225              230              235              240
Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn Ser Val Ala
      245              250              255
Asp Arg Asp Asn Ser Pro Ser Ser Cys Ala Gly Leu Phe Ile Ala Ser
      260              265              270
His Ile Gly Phe Asp Trp Pro Gly Val Trp Val His Leu Asp Ile Ala
      275              280              285
Ala Pro Val His Ala Gly Glu Arg Ala Thr Gly Phe Gly Val Ala Leu
      290              295              300
Leu Leu Ala Leu Phe Gly Arg Ala Ser Glu Asp Pro Leu Leu Asn Leu
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<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly	Met
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Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val	Ser
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His	Met	Ile	Leu	Phe	Asp	Gln	Ala	Gln	Arg	Ser	Val	Arg	Gln	Gln	Leu
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	210				215						220				
Ala	Glu	Leu	Asp	Gln	Leu	Val	Ile	Asp	Ser	Ala	Val	Glu	Lys	Arg	Glu
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Val	Val	Met	Glu	Gly	Tyr	Leu	Phe	Lys	Arg	Ala	Ser	Asn	Xaa	Phe	Lys
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<212> PRT

<213> Homo sapiens

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 <213> Homo sapiens

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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
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Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met
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 Tyr Gln Asp Phe Asp Trp Leu Arg Ser Lys Leu Glu Glu Ser Gln Pro
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 Thr His Leu Ile Pro Pro Leu Pro Glu Lys Phe Val Val Lys Gly Val
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<211> 981
 <212> PRT
 <213> Homo sapiens

<400> 5918

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Ser Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Asn His
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Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
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Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe
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Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu
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Ala Gly Ile Leu Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met
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Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
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 850 855 860
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<211> 1320

<212> DNA

<213> Homo sapiens

<400> 5919

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<212> DNA

<213> Homo sapiens

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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Ser	Lys	Ile	Ile	Cys	Cys
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Ser	Trp	Thr	Asn	Asp	Gly	Gln	Tyr	Leu	Ala	Leu	Gly	Met	Phe	Asn	Gly
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Pro	Glu	Glu	Glu	Asp	Asp	Ser	Pro	Arg	Asp	Asp	Asn	Leu	Glu	Glu	Arg
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
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Ser Ser Pro Leu Leu Ala Phe His Val His Leu Lys Trp Thr Ser Leu		
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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens .

<400> 5923

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<213> Homo sapiens

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser
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Leu Pro Ile Leu Arg Pro Met Val Leu Ser Thr Leu Arg Gln Leu Ser
                485                490                495
Thr Ser Thr Ser Ile Leu Thr Asp Pro Ala Gln Leu Pro Glu Gln Ala
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Ser Lys Ala Val Thr Arg Ile Gly Lys Arg Leu Gly Glu Ser
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<210> 5927

<211> 1786

<212> DNA

<213> Homo sapiens

<400> 5927

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420

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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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      35             40             45
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu
      50             55             60
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser
      65             70             75             80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala
      85             90             95
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly
      100            105            110
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr
      115            120            125
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln
      130            135            140
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His
      145            150            155            160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala
      165            170            175
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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<210> 5930
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
 115 120 125
 Gly Ala His His His His His His His Pro His Pro His His Ala
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<210> 5932
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212>-DNA

<213> Homo sapiens

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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 20 25 30
 Ser Lys Val Arg Glu Gln Leu Glu Gln Glu Leu Glu Glu Leu Thr Ala
 35 40 45
 Ser Leu Phe Glu Glu Ala His Lys Met Val Arg Glu Ala Asn Met Lys
 50 55 60
 Gln Ala Ala Ser Glu Lys Gln Leu Lys Glu Ala Arg Gly Lys Ile Asp
 65 70 75 80
 Met Leu Gln Ala Glu Val Thr Ala Leu Lys Thr Leu Val Ile Thr Ser
 85 90 95
 Thr Pro Ala Ser Pro Asn Arg Glu Leu His Pro Gln Leu Leu Ser Pro

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Thr Lys Ala Gly Pro Arg Lys Gly His Ser Arg His Lys Ser Thr Ser
      115      120      125
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      130      135      140
Pro Asp Arg Glu Gly Lys Glu Val Asp Thr Ile Leu Phe Ala Glu Phe
145      150      155      160
Gln Ala Trp Arg Glu Ser Pro Thr Leu Asp Lys Thr Cys Pro Phe Leu
      165      170      175
Glu Arg Val Tyr Arg Glu Asp Val Gly Pro Cys Leu Asp Phe Thr Met
      180      185      190
Gln Glu Leu Ser Val Leu Val Arg Ala Ala Val Glu Asp Asn Thr Leu
      195      200      205
Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala
      210      215      220
Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr
225      230      235      240
Arg Thr Cys Arg His Arg Ile Arg Leu Gly Asp Ser Lys Ser His Tyr
      245      250      255
Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe
      260      265      270
Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
		35					40					45			
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Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
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Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85					90					95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
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Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
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Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Ala Phe Leu Leu Thr Ile Pro Glu Asn Ala Glu Gly His Ile Ile Leu
 20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
 65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
 85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
 100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
 115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
 130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
 145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
 165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
 180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
 195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
 210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
 225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
 245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
 260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
 275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
 290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
 305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
 325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
 340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
 355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
 370          375          380
Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
 385          390          395          400
Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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Cys Lys Arg Lys Glu Gln Glu Gln Lys Glu Arg Ala Leu Gln Pro
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20      25      30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35      40      45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50      55      60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65      70      75      80
Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

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5121

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95

<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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 20 25 30
 Pro Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys

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      35          40          45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
  50          55          60
Ala Thr Phe Cys Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp Pro
  65          70          75          80
Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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  120
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  660
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<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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  20          25          30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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      35              40              45
Thr Lys Pro Gly Ile Leu Cys Cys Phe Gln Asn Glu Phe Glu Asn Pro
      50              55              60
Cys Phe Pro Lys Ser His Phe Ser Val Thr Gln Ala Gly Glu Gln Trp
65              70              75              80
Arg Asp Leu Ser Ser Pro Gln Pro Pro Pro Arg Phe Lys Gln Phe
      85              90              95
Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp His Arg His Pro Pro Pro
      100             105             110
Arg Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Pro Arg
      115             120             125
Ser Arg Ser Pro Asp Leu Met Xaa Ser Ala His Leu Gly Leu Pro Lys
      130             135             140
Cys Trp Asp Tyr Arg Arg Glu Pro Leu Arg Pro Ala Gln Ile Ser Leu
145             150             155             160
Leu Phe Ser Lys Ser Pro Ser Gln Asp Ile Gln Ala Lys Ala
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<210> 5945

<211> 869

<212> DNA

<213> Homo sapiens

<400> 5945

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<210> 5946
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 5946
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 Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg
 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
 85 90 95
 Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
 100 105 110
 Glu Gln Leu Lys Glu Glu Arg Glu Leu
 115 120

<210> 5947
 <211> 2283
 <212> DNA
 <213> Homo sapiens

<400> 5947
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2283

<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
 35 40 45
 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
 50 55 60
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<210> 5949
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 <212> DNA
 <213> Homo sapiens

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
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Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
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His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Val	Gly	Lys	Met	Leu	Gly	
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Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
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Ser	Ile	Lys	Arg	Tyr	Asp	Gly	Asp	Ile	Thr	Asp	Leu	Gly	Leu	Thr	Leu
			165					170					175		
Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
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Pro	Gly	Gly	Lys	Thr	Ile	Pro	Val	Thr	Asn	Glu	Asn	Lys	Ile	Ser	Tyr
		195				200					205				
Ile	His	Leu	Met	Ala	His	Phe	Arg	Met	His	Thr	Gln	Ile	Lys	Asn	Gln

210	215	220
Thr Ala Ala Leu Ile Ser Gly Phe Arg Ser Ile Ile Lys Pro Glu Trp		
225	230	235
Ile Arg Met Phe Ser Thr Pro Glu Leu Gln Arg Leu Ile Ser Gly Asp		240
	245	250
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
	370	375
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
385	390	395

<210> 5951
 <211> 1724
 <212> DNA
 <213> Homo sapiens

<400> 5951
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 720

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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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 Ala Pro Arg Phe Pro Pro Gly Gly Phe Ala Ala Gly Arg Thr Met Leu
 35 40 45
 Leu Lys Glu Tyr Arg Ile Cys Met Pro Leu Thr Val Asp Glu Tyr Lys
 50 55 60
 Ile Gly Gln Leu Tyr Met Ile Ser Lys His Ser His Glu Gln Ser Asp
 65 70 75 80
 Arg Gly Glu Gly Val Glu Val Val Gln Asn Glu Pro Phe Glu Asp Pro
 85 90 95
 His His Gly Asn Gly Gln Phe Thr Glu Lys Arg Val Tyr Leu Asn Ser

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Lys Leu Pro Ser Trp Ala Arg	Ala Val Val Pro Lys Ile Phe Tyr Val	
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Thr Glu Lys Ala Trp Asn Tyr Tyr	Pro Tyr Thr Ile Thr Glu Tyr Thr	
130	135	140
Cys Ser Phe Leu Pro Lys Phe Ser	Ile His Ile Glu Thr Lys Tyr Glu	
145	150	155
Asp Asn Lys Gly Ser Asn Asp Thr	Ile Phe Asp Asn Glu Ala Lys Asp	
165	170	175
Val Glu Arg Glu Val Cys Phe Ile	Asp Ile Ala Cys Asp Glu Ile Pro	
180	185	190
Glu Arg Tyr Tyr Lys Glu Ser Glu	Asp Pro Lys His Phe Lys Ser Glu	
195	200	205
Lys Thr Gly Arg Gly Gln Leu Arg	Glu Gly Trp Arg Asp Ser His Gln	
210	215	220
Pro Ile Met Cys Ser Tyr Lys Leu	Val Thr Val Lys Phe Glu Val Trp	
225	230	235
Gly Leu Gln Thr Arg Val Glu Gln	Phe Val His Lys Val Val Arg Asp	
245	250	255
Ile Leu Leu Ile Gly His Arg Gln	Ala Phe Ala Trp Val Asp Glu Trp	
260	265	270
Tyr Asp Met Thr Met Asp Glu Val	Arg Glu Phe Glu Arg Ala Thr Gln	
275	280	285
Glu Ala Thr Asn Lys Lys Ile Gly	Ile Phe Pro Pro Ala Ile Ser Ile	
290	295	300
Ser Ser Ile Pro Leu Leu Pro Ser	Ser Val Arg Ser Ala Pro Ser Ser	
305	310	315
Ala Pro Ser Thr Pro Leu Ser Thr	Asp Ala Pro Glu Phe Leu Ser Val	
325	330	335
Pro Lys Asp Arg Pro Arg Lys Lys	Ser Ala Pro Glu Thr Leu Thr Leu	
340	345	350
Pro Asp Pro Glu Lys Lys Ala Thr	Leu Asn Leu Pro Gly Met His Ser	
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Ser Asp Lys Pro Cys Arg Pro Lys	Ser Glu	
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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360

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<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

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 Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu
 50 55 60
 Val Gln Glu Val Met Glu Glu Trp Asn Ala Leu Gln Ser Val Glu
 65 70 75 80
 Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala
 85 90 95
 Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile
 100 105 110
 Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser
 115 120 125
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 Thr Lys Pro Val Ile Leu Gly Leu
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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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His Ile Thr Ile His Met His Gly Gly Thr Ser Ser Asp Gly Ser Ser
      65      70      75      80
Ser Met Ala Ala Ile Tyr Gly Gly Val Glu Gly Gly Gly Thr Arg Ser
      85      90      95
Glu Val Leu Leu Val Ser Glu Asp Gly Lys Ile Leu Ala Glu Ala Asp
      100      105      110
Gly Leu Ser Thr Asn His Trp Leu Ile Gly Thr Asp Lys Cys Val Glu
      115      120      125
Arg Ile Asn Glu Met Val Asn Arg Ala Lys Arg Lys Ala Gly Val Asp
      130      135      140
Pro Leu Val Pro Leu Arg Ser Leu Gly Leu Ser Leu Ser Gly Gly Asp
      145      150      155      160
Gln Glu Asp Ala Gly Arg Ile Leu Ile Glu Glu Leu Arg Asp Arg Phe
      165      170      175
Pro Tyr Leu Ser Glu Ser Tyr Leu Ile Thr Thr Asp Ala Ala Gly Ser
      180      185      190
Ile Ala Thr Ala Thr Pro Asp Gly Gly Val Val Leu Ile Ser Gly Thr
      195      200      205
Gly Ser Asn Cys Arg Leu Ile Asn Pro Asp Gly Ser Glu Ser Gly Cys
      210      215      220
Gly Gly Trp Gly His Met Met Gly Asp Glu Gly Ser Ala Leu Ser Ala
      225      230      235      240
Pro Ser Ala Tyr Trp Ile Ala His Gln Ala Val Lys Ile Val Phe Asp
      245      250      255
Ser Ile Asp Asn Leu Glu Ala Ala Pro His Asp Ile Gly Tyr Val Lys
      260      265      270
Gln Ala Met Phe His Tyr Phe Gln Val Pro Asp Arg Leu Gly Ile Leu
      275      280      285
Thr His Leu Tyr Arg Asp Phe Asp Lys Cys Arg Phe Ala Gly Phe Cys
      290      295      300
Arg Lys Ile Ala Glu Gly Ala Gln Gln Gly Asp Pro Leu Ser Arg Tyr
      305      310      315      320
Ile Phe Arg Lys Ala Gly Glu Met Leu Gly Arg His Ile Val Ala Val
      325      330      335
Leu Pro Glu Ile Asp Pro Val Leu Phe Gln Gly Lys Ile Gly Leu Pro
      340      345      350
Ile Leu Cys Val Gly Ser Val Trp Lys Ser Trp Glu Leu Leu Lys Glu
      355      360      365
Gly Phe Leu Leu Ala Leu Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn
      370      375      380
Phe Phe Ser Ser Phe Thr Leu Met Lys Leu Arg His Ser Ser Ala Leu
      385      390      395      400
Gly Gly Ala Ser Leu Gly Ala Arg His Ile Gly His Leu Leu Pro Met
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Asp Tyr Ser Ala Asn Ala Ile Ala Phe Tyr Ser Tyr Thr Phe Ser
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<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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 35 40 45
 Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val
 50 55 60
 Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu
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 Ile Gln Gln Glu Leu Ile Asn Gln Gly Leu

100

105

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 5959
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 180
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 240
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 300
 tcaatgcttt cctcagaagc tgcttgggta tcgcaatata aggatatcac tgacgtggat
 360
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac
 420
 aggtataaaa atcttccac agcttccga aagcttcagt tcctggagtt acagaaggac
 480
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 600
 gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgactgga ggtgtttgca
 660
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgac
 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac cgtcaagta
 780
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 830

<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
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 Tyr Asp Asp Asn Leu Phe Cys His Leu Val Asp Glu Val Leu Leu Phe
 20 25 30
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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      85      90      95
Met Lys Val Pro Asp Cys Ala Glu Thr Phe Met Thr Leu Leu Leu Val
      100      105      110
Ile Thr Asp Arg Tyr Lys Asn Leu Pro Thr Ala Ser Arg Lys Leu Gln
      115      120      125
Phe Leu Glu Leu Gln Lys Asp Leu Val Asp Asp Phe Arg Ile Arg Leu
      130      135      140
Thr Gln Val Met Lys Glu Glu Thr Arg Ala Ser Leu Gly Phe Arg Tyr
      145      150      155      160
Cys Ala Ile Leu Asn Ala Val Asn Tyr Ile Ser Thr Val Leu Ala Asp
      165      170      175
Trp Ala Asp Asn Val Phe Phe Leu Gln Leu Gln Gln Ala Ala Leu Glu
      180      185      190
Val Phe Ala Glu Asn Asn Thr Leu Ser Lys Leu Gln Leu Gly Gln Leu
      195      200      205
Ala Ser Met Glu Ser Ser Val Phe Asp Asp Met Ile Asn Leu Leu Glu
      210      215      220
Arg Leu Lys His Asp Met Leu Thr Arg Gln Val Asp His Val Phe Arg
      225      230      235      240
Glu Val Lys Asp Ala Ala Lys Leu Tyr Lys Lys
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<210> 5961
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 5961
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 aatgaagcga gaccccgctc taaaaaaaaa aattgagggg tcaaagagga tgccaaactt
 120
 aattagagac tgagacaggg caggggtgcg aggtgtctgc atgcgtttca tgtggatgcc
 180
 cgtgtctatt ctggcctgct cctggggccc ctcccactc agccctggct gatgagaatg
 240
 ggacagggac tcccttctcg tgtccctgtg cagcgtcggc ccaggaggta gcagagcagt
 300
 atatgcacat ctgggtgtgc cctcctgcat gtcccccacac atctgtcatt cctgtctttg
 360
 cacacctatg tgactcccgc atgttttgtgt ccttatgtgt cccatgcatg ctcccacatc
 420
 gaccttgctg gttctcgcgt gtctgtgtgc ggccagtcct gccttactc tctcatgggt
 480
 ggccctggca gcatgtctgg ctcccagca ggtgagctca ggagataaga tggaagatgc
 540
 aacagccaat ggtcaagaag actccaaggc ccagatggg tccac
 585

<210> 5962
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
 1           5           10           15
Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
      20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
      35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
      50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
      85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
      100          105          110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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120
gaagaaaaag tgaacgcatc tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
180
atagttctgg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctggttccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
ccagagattc agggcaccat gagggagttg tccaaagaaa tgatgaaggc tgggatcata
420
gaggagatgt tagaggacac ttttgaaagc atggacgac aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc ctttcagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg agggaggagga agaggctctg gaggccatgc agtcccggct ggccacactc
660
cgcagctagg ggctgcctac cccgctgggt gtgcacacac tctctcaag agctgccatt
720
ttatgtgtct cttgcactac acctctgttg tgaggactac cttttggag aaggttctgt
780
ttgtctcttt tcattctctg ccagggtttt gggatcgcaa agggattggt cttataaaag
840
tggcataaat aatgcacat ttttaggag tatagacaga tatatcttat tgtggggagg
900

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ggaagaaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgtc
 960
 gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
 1020
 agcatttggc cccattgtag attgcctgtg gcagtaaact ttcaaggtgt cagctgcccc
 1080
 agattgcttc atttctggg tgtggaaaga gttgctatgg ccaggcatat gggatttgga
 1140
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccgcttttca cagacatggg
 1200
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 1260
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 1288

<210> 5964
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 5964
 Met Gly Leu Phe Gly Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val
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 Asn Glu Trp Ser Leu Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg
 20 25 30
 Gln Ile Arg Asp Ile Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val
 35 40 45
 Lys Asp Ala Ala Lys Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala
 50 55 60
 Lys Glu Met Ile Arg Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser
 65 70 75 80
 Lys Ala His Met Asn Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala
 85 90 95
 Val Leu Arg Val Ala Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys
 100 105 110
 Ala Met Gln Ser Leu Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg
 115 120 125
 Glu Leu Ser Lys Glu Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu
 130 135 140
 Glu Asp Thr Phe Glu Ser Met Asp Asp Gln Glu Met Glu Glu Glu
 145 150 155 160
 Ala Glu Met Glu Ile Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala
 165 170 175
 Leu Gly Lys Ala Pro Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu
 180 185 190
 Pro Pro Gly Ala Met Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu
 195 200 205
 Ala Leu Glu Ala Met Gln Ser Arg Leu Ala Thr Leu Arg Ser
 210 215 220

<210> 5965
 <211> 1011
 <212> DNA
 <213> Homo sapiens

<400> 5965
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 120
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
 180
 ggaagcagtg ggccaggga ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
 gagtggaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagtggag
 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
 ctggctgagt gggaggcaaa cccactcatc tgcctgtat gtacaaagta caacctgaga
 480
 atcacaagcg gtgtggtggt gtgtcagtgt ggcctgtcca tccatctca ttcttctgag
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 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca
 720
 tcattctatg ggggtgaaga caactcattc cctctgagga gccttgata tacaagcctt
 780
 ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
 840
 ccgacatctg ttcttggtct tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
 960
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 1011

<210> 5966
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 5966
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 Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
 20 25 30
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln
	100		105		110										
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
	115		120		125										
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
	130		135		140										
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
	145		150		155										
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
	165		170		175										
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
	180		185		190										
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
	195		200		205										
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
	210		215		220										
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
	225		230												

<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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120
tgtgcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa
180
atcttttctt ctattttaga aatggatttc aatggtgttc agtttgtttg cagaaaccta
240
ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc
300
acttcttcac taatatcagg gcttattttg atatttgaat ggtggtattt tcgcaaatac
360
ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggagggggt
420
gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa
480
agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac
540
aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct
600
gccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca
660
ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agtcatgaa
720
gccttgga taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
780
aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag ccttcttga actacaagca
840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
 acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct
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 1080
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 1140
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 1200
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 1320
 ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc
 1380
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 1440
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 1500
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 1560
 accatttaat tttcatgac gtcaatggaa tcaaagcatt aagggtcaaa tgagaaagt
 1620
 caggttgta ctgcatgcct tgcctcattt cacaacaaat tcttagcagt ttccaaaaa
 1680
 tgcaggaggt ccaaaaggat ggaatgattt aggaaatcct agcaaatgaa aatgtgtggg
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 ctttcc
 1806

<210> 5968
 <211> 434
 <212> PRT
 <213> Homo sapiens

<400> 5968
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 Ser Met Phe Leu Asn Thr Leu Thr Pro Lys Phe Tyr Val Ala Leu Thr
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 Gly Thr Ser Ser Leu Ile Ser Gly Leu Ile Leu Ile Phe Glu Trp Trp
 35 40 45
 Tyr Phe Arg Lys Tyr Gly Thr Ser Phe Ile Glu Gln Val Ser Val Ser
 50 55 60
 His Leu Arg Pro Leu Leu Gly Gly Val Asp Asn Asn Ser Ser Asn Asn
 65 70 75 80
 Ser Asn Ser Ser Asn Gly Asp Ser Asp Ser Asn Arg Gln Ser Val Ser
 85 90 95
 Glu Cys Lys Val Trp Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu

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      100      105      110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
      115      120      125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
      130      135      140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
      145      150      155      160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165      170      175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180      185      190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195      200      205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
      210      215      220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
      225      230      235      240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245      250      255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260      265      270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275      280      285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290      295      300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
      305      310      315      320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325      330      335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340      345      350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355      360      365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370      375      380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
      385      390      395      400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
      405      410      415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
      420      425      430
Ala Ala

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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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60

ctgggcggcg ggggaaggggt cccggatctg cagcctgggg tcttggccag ccaggccatg

120

attgagaaga tcctgagcga ggacccccgg tggcaagatg ccaacttcgt gctggggcagc
 180
 tacaagacgg agcagtgtccc gaagccgcca cgctgtgtcc gccagggtta tgcgtgcccc
 240
 cactaccaca atagccggga caggcggcgc aacccccggc ggttccagta caggtccacg
 300
 ccttgccccca gcgtgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
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 429

<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

Arg	Pro	Pro	Val	Cys	Asp	Val	Arg	Glu	Leu	Gln	Ala	Gln	Glu	Ala	Leu
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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
		20						25					30		
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35					40					45			
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
		50				55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65					70				75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85						90					95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120						125			
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
		130				135								140	

<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
 catgtccett aggtcagcta agccacatc agtgtccaaa taggcaacat ccctatttta
 180
 tagatggcca tccccatttt agagatagct cccttttata tccccatttt acaggtgaag
 240
 gaattgaggg acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca
 300

gggcttcaaa caccaaagtgt gttcctttgt cttccgtttc ccacttgett cccagaggct
 360
 cagcaagtag cctctggcca ctgagcatcc tcccggccac tttgtccctt gcttctgat
 420
 ccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc
 480
 cacacctacc ctcagccttg aagctgcagc aatggctgct tccagatgag cacaccctcg
 540
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 565

<210> 5972
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 5972
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 Cys Pro Asn Arg Gln His Pro Tyr Phe Ile Asp Gly His Pro His Phe
 20 25 30
 Arg Asp Ser Ser Leu Leu Tyr Pro His Phe Thr Gly Glu Gly Ile Glu
 35 40 45
 Ala Gln Lys Val Arg Ser Leu Leu Gln Asp Asp Gln Leu Asn Gln Asn
 50 55 60
 Phe Arg Ala Ser Asn Thr Lys Cys Val Pro Leu Ser Ser Val Ser His
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 Leu Leu Pro Arg Gly Ser Ala Ser Ser Leu Trp Pro Leu Ser Ile Leu
 85 90 95
 Pro Pro Thr Leu Leu Pro Ala Ser
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<210> 5973
 <211> 797
 <212> DNA
 <213> Homo sapiens

<400> 5973
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 120
 aacgagcctt cgaatcatgg acgcgcgggc ccagctcctc ctccgagttc ctcatccggg
 180
 gccgtcactc acatccgggg cctcactca catccgggac cctcatccgg ggetctcacc
 240
 cacatccggg accctcatgc ctgggcggag gagggggggc ccttcattcg ggaccctgc
 300
 actccgtcgc cggaagtgcc accgagaagc gcgggcctcg gggctgtcta cagcggcccg
 360
 ggagaggctg tgggtggccc gagcgcgagt gtgtaggtga caggacagcg gccaggcccc
 420
 cccctccctt cgggtagtag ccggaagccg ttttggggtc gcagcggggg ggcagcttgt
 480

ttgccttca cgggagtaga agggagcggc gtccgccgcg gccgacggta gtccgcttcc
 540
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 600
 tcacctcgcg gaccgagggc ccgcgcagcag gagccggcga ccgtgccctg gtgcgagctg
 660
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 720
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 780
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<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20				25						30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
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Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
	50				55					60					
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65				70				75						80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
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Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
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<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
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 2175

<210> 5976
 <211> 564
 <212> PRT
 <213> Homo sapiens

<400> 5976
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 35 40 45
 Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser
 50 55 60
 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser
 65 70 75 80
 Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu
 85 90 95
 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp
 100 105 110
 Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe
 115 120 125
 Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys Val
 130 135 140
 Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn Tyr
 145 150 155 160
 Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro Leu
 165 170 175
 Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile Tyr
 180 185 190
 Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys Ser
 195 200 205
 Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val
 210 215 220
 His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn Ile
 225 230 235 240
 Asn Arg Gln Leu Glu Val Tyr Thr Ser Gly Gly Asp Pro Glu Ser Val
 245 250 255
 Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr Phe
 260 265 270
 Ser Leu Val Gly Leu Leu Arg Leu His Ser Leu Leu Gly Asp Tyr Tyr
 275 280 285
 Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser Met
 290 295 300
 Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val Gly
 305 310 315 320
 Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp Ala Ile Arg Val Phe

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          325          330          335
Ala Asn Ile Leu Leu Tyr Ile Gln Arg Thr Lys Ser Met Phe Gln Arg
          340          345          350
Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His
          355          360          365
Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu
          370          375          380
Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg
          385          390          395          400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
          405          410          415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
          420          425          430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
          435          440          445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
          450          455          460
Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
          465          470          475          480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
          485          490          495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
          500          505          510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
          515          520          525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
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Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys Met
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<210> 5977
 <211> 2320
 <212> DNA
 <213> Homo sapiens

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cccagtgact ttgggcttgg tcatgctact tgctttgggc aatgaaatgt gagtagacat
180
caagtatacc accatcacac agaaatttta ttttttattt tattttttat agagacaggg
240
tctcactaca ttgcctagat tgggtctcaa ctctgggct caagcaatct tcctcttctt
300
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360
taatgcatgt ggtaatccac aggagatcac atttagtata tgaccaagtt aattaagaag
420
tcaaaaaaca cgtaaattt aagcagaata aggctgggtt cgggtggctca tgctgtgat
480

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660
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720
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780
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gccgggatta taggcattga gaaccacacc tggctagttt ttgtattttt agtagagatg
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1080
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2100

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 2320

<210> 5978
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 5978
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 35 40 45
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 Trp Trp Tyr Thr Pro Val Ile Pro Ala Thr Gln Glu Ala
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<210> 5979
 <211> 1095
 <212> DNA
 <213> Homo sapiens

<400> 5979
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 420
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 660

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 720
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 780
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<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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			20					25					30		
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35					40					45			
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50					55					60				
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65					70					75				80	
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
			85						90					95	
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Ala	Gln	Leu	Glu	Pro	Ile	Thr
			100					105						110	
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
	115						120					125			
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130					135					140				
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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 1320
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 1444

<210> 5988
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 5988
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 Thr Pro Ser Glu Arg Gly Met Thr Tyr Asp Ala Leu His Val Phe Asp
 35 40 45
 Trp Ile Lys Ala Arg Ser Gly Asp Asn Pro Val Tyr Ile Trp Gly His
 50 55 60
 Ser Leu Gly Thr Gly Val Ala Thr Ile Trp Cys Gly Ala Ser Val Ser
 65 70 75 80
 Glu Thr Pro Pro Asp Ala Leu Ile Leu Glu Ser Pro Phe Thr Asn Ile
 85 90 95
 Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe
 100 105 110
 Pro Gly Phe Asp Trp Phe Phe Leu Asp Pro Ile Thr Ser Ser Gly Ile
 115 120 125
 Lys Phe Ala Asn Asp Glu Asn Val Lys His Ile Ser Cys Pro Leu Leu
 130 135 140
 Ile Leu His Ala Glu Asp Asp Pro Val Val Pro Phe Gln Leu Gly Arg
 145 150 155 160
 Lys Leu Tyr Ser Ile Ala Ala Pro Ala Arg Ser Phe Arg Asp Phe Lys
 165 170 175
 Val Gln Phe Val Pro Phe His Ser Asp Leu Gly Tyr Arg His Lys Tyr
 180 185 190
 Ile Tyr Lys Ser Pro Glu Leu Pro Arg Ile Leu Arg Glu Phe Leu Gly
 195 200 205
 Lys Ser Glu Pro Glu His Gln His
 210 215

<210> 5989
 <211> 1583
 <212> DNA
 <213> Homo sapiens

<400> 5989

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480
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1380
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aagatttatg cccagagcct tgc
1583

<210> 5990
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 5990
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
 85 90 95
 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
 100 105 110
 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
 130 135 140
 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
 145 150 155 160
 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
 165 170 175
 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
 225 230 235 240
 Lys Tyr Phe Ile Gln Glu Gly Asp Gly Trp Val Tyr Phe Asn Pro Leu
 245 250 255
 Trp Lys Ala His
 260

<210> 5991
 <211> 2440
 <212> DNA
 <213> Homo sapiens

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Leu	Cys	Ser	Ser	Ser	Cys	Pro	Leu	Leu	Arg	Thr	Leu	Asp	Val	Gln	Trp

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Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu Ser Pro Pro
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Trp Gly Glu Arg Ala Arg Leu Leu Asp Leu Leu Leu Pro Ser Asp Pro
      340              345              350
Ser Cys Ser Pro Lys Asp Ile Gly Met Ser Leu Cys Cys His Val Leu
      355              360              365
Ser Leu Leu Gln Ala Gln Arg Gly Ser Gly Arg Arg Gln Gly Leu Leu
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<212> DNA
<213> Homo sapiens

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720
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<211> 140

<212> PRT

<213> Homo sapiens

<400> 5996

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Arg	Gln	Phe	Val	Pro	Leu	Ala	Ser	Gly	Gln	Ala	Gln	Val	Val	Leu	Ser
65					70				75					80	
Trp	Trp	Asp	Ile	Glu	Met	Asp	Pro	Glu	Gly	Lys	Ile	Lys	Cys	Thr	Met
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Ala	Pro	Phe	Trp	Ala	His	Ser	Asp	Pro	Glu	Glu	Met	Gln	Trp	Arg	Asp
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His	Trp	Xaa	Ala	Val	Cys	Val	Leu	Pro	Ala	Thr	Arg	Gly	Ala	Cys	Gly
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<211> 1759

<212> DNA

<213> Homo sapiens

<400> 5997

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 <213> Homo sapiens

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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			20					25					30		
Gln	Arg	Pro	Asp	Gln	Leu	Asp	Lys	Val	Glu	Gln	Tyr	Arg	Arg	Arg	Glu
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Asp	Trp	Arg	Gln	Ser	Ile	Asn	Thr	Ile	Glu	Ser	Leu	Lys	Asp	Val	Lys
			100				105						110		
Asp	Ala	Val	Val	Gln	His	Ser	Gln	Leu	Ala	Ala	Ala	Val	Glu	Asn	Leu
			115				120						125		
Lys	Asn	Ile	Phe	Ser	Val	Pro	Glu	Ile	Val	Arg	Glu	Thr	Gln	Asp	Leu
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Gln	Gly	Leu	Ser	Asp	Glu	Leu	Ala	Lys	Gln	Leu	Trp	Met	Val	Leu	Gln
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Val	Arg	Ile	Ile	Glu	Arg	Glu	Glu	Lys	Ile	Asp	Arg	Arg	Ile	Leu	Asp
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Arg	Lys	Lys	Gln	Thr	Gly	Phe	Val	Pro	Pro	Gly	Arg	Pro	Lys	Asn	Trp
				245				250						255	
Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
			260				265						270		
Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val

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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
305	310	315
Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu	Ser Thr Arg Met Gln
325	330	335
Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu	Ile Val Ser Leu Leu
340	345	350
Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
355	360	365
Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
370	375	380
Pro His Val Val Ser Glu	Leu Leu Asp Thr Tyr	Met Ser Thr Leu Thr
385	390	395
Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu	Glu Thr Asp Lys Lys
405	410	415
Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp	Gln Asp Gly Tyr Tyr
420	425	430
Gln Thr Thr Leu Pro Ala	Ile Val Phe Gln Met	Phe Glu Gln Asn Leu
435	440	445
Gln Val Ala Ala Gln Ile	Ser Glu Asp Leu Lys	Thr Lys Val Leu Val
450	455	460
Leu Cys Leu Gln Gln Met	Asn Ser Phe Leu Ser	Arg Tyr Lys Asp Glu
465	470	475
Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
485	490	495
Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
500	505	510
Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr	Leu Lys Asn Glu Val
515	520	525
Glu Glu Gly Val Ser Pro	Ser Gln Pro Ser Met	Asp Gly Ile Leu Asp
530	535	540
Ala Ile Ala Lys Glu Gly	Cys Ser Gly Leu Leu	Glu Glu Val Phe Leu
545	550	555
Asp Leu Glu Gln His Leu	Asn Glu Leu Met Thr	Lys Lys Trp Leu Leu
565	570	575
Gly Ser Asn Ala Val Asp	Ile Ile Cys Val Thr	Val Glu Asp Tyr Phe
580	585	590
Asn Asp Phe Ala Lys Ile	Lys Lys Pro Tyr Lys	Lys Arg Met Thr Ala
595	600	605
Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
Lys Arg Ile Ser Phe Arg	Ser Pro Glu Glu Arg	Lys Glu Gly Ala Glu
625	630	635
Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
645	650	655
Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
660	665	670
Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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Gln Thr Ile Met Glu Thr Leu Glu Gln Gly Pro Ala Gln Ala Ser Pro						
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<210> 6002

<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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 Gly Asn His Ser Tyr Cys Arg Asn Pro Asp Glu Asp Pro Ala Gly Pro
 65 70 75 80
 Trp Cys Tyr Val Ser Gly Glu Ala Gly Val Pro Glu Lys Arg Pro Cys
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 Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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 Thr Thr Glu Ile Gln Glu Ala Ser Glu Gly Pro Gly Ala Asp Glu Val
 115 120 125
 Gln Val Phe Ala Pro Ala Asn Ala Leu Pro Ala Arg Ser Glu Ala Ala
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 145 150 155 160
 Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr
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 Met Met Val Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr
 180 185 190
 Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
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 Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
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<210> 6003
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 <213> Homo sapiens

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<210> 6004

<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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Gly	Arg	Gly	Arg	Asp	Cys	Gly	Gly	Asn	Gly	Pro	Ala	Glu	Ala	Pro	Ala

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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
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Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
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			100					105					110		
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
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Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
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Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
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Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
			165					170						175	
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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 35 40 45
 Ser Ser Thr Asn Thr Val Gly Ala Thr Val Asn Ser Gln Ala Ala Gln
 50 55 60
 Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe Thr Asp
 65 70 75 80
 Asp Leu His Lys Leu Val Asp Asn Trp Ala Arg Asp Ala Met Asn Leu
 85 90 95
 Ser Gly Arg Arg Gly Ser Lys Gly His Met Asn Tyr Glu Gly Pro Gly
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 Met Ala Arg Lys Phe Ser Ala Pro Gly Gln Leu Cys Ile Ser Met Thr
 115 120 125
 Ser Asn Leu Gly Gly Ser Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser
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 Leu Gly His Phe Thr Lys Ser Met Cys Pro Pro Gln Gln Tyr Gly Phe
 145 150 155 160
 Pro Ala Thr Pro Phe Gly Ala Gln Trp Ser Gly Thr Gly Gly Pro Ala

165 170 175
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<210> 6009
 <211> 1570
 <212> DNA
 <213> Homo sapiens

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<210> 6010
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 <212> PRT
 <213> Homo sapiens

<400> 6010
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 Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys
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 Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser
 65 70 75 80
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 Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr
 100 105 110
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 130 135 140
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 210 215 220
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu
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<212> DNA
<213> Homo sapiens
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<210> 6012
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 <212> PRT
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<400> 6012
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 85 90 95
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<210> 6013

<211> 2204

<212> DNA

<213> Homo sapiens

<400> 6013

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<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
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Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
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Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Gly Asp Ser Asn Pro Asn
      130              135              140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
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<210> 6015
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 <212> DNA
 <213> Homo sapiens

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<210> 6016
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 6016
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20     25     30
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35     40     45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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50 55 60
 Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp Ser Gln Lys Pro Ala
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 Gln Tyr Ile

<210> 6017

<211> 2091

<212> DNA

<213> Homo sapiens

<400> 6017

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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp
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 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser
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Ala Ile Tyr Phe Thr Ser Gly Thr Ser Gly Leu Pro Lys Met Ala Glu					
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His Ser Tyr Ser Ser Leu Gly Leu Lys Ala Lys Met Asp Ala Gly Trp					
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Thr Gly Leu Gln Ala Ser Asp Ile Met Trp Thr Ile Ser Asp Thr Gly					
	210		215		220
Trp Ile Leu Asn Ile Leu Gly Ser Leu Leu Glu Ser Trp Thr Leu Gly					
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Ala Cys Thr Phe Val His Leu Leu Pro Lys Phe Asp Pro Leu Val Ile					
	245		250		255
Leu Lys Thr Leu Ser Ser Tyr Pro Ile Lys Ser Met Met Gly Ala Pro					
	260		265		270
Ile Val Tyr Arg Met Leu Leu Gln Gln Asp Leu Ser Ser Tyr Lys Phe					
	275		280		285
Pro His Leu Gln Asn Cys Leu Ala Gly Gly Glu Ser Leu Leu Pro Glu					
	290		295		300
Thr Leu Glu Asn Trp Arg Ala Gln Thr Gly Leu Asp Ile Arg Glu Phe					
	305		310		315
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	325		330		335
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Gln Val Ile Asp Asp Lys Gly Asn Val Leu Pro Pro Gly Thr Glu Gly					
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Asp Ile Gly Ile Arg Val Lys Pro Ile Arg Pro Ile Gly Ile Phe Ser					
	370		375		380
Gly Tyr Val Glu Asn Pro Asp Lys Thr Ala Ala Asn Ile Arg Gly Asp					
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Phe Trp Leu Leu Gly Asp Arg Gly Ile Lys Asp Glu Asp Gly Tyr Phe					
	405		410		415
Gln Phe Met Gly Arg Ala Asp Asp Ile Ile Asn Ser Ser Gly Tyr Arg					
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Ile Gly Pro Ser Glu Val Glu Asn Ala Leu Met Lys His Pro Ala Val					
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Val Glu Thr Ala Val Ile Ser Ser Pro Asp Pro Val Arg Gly Glu Val					
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Val Lys Ala Phe Val Val Leu Ala Ser Gln Phe Leu Ser His Asp Pro					
	465		470		475
Glu Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr Ala					
	485		490		495
Pro Tyr Lys Tyr Pro Arg Lys Ile Glu Phe Val Leu Asn Leu Pro Lys					
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Thr Val Thr Gly Lys Ile Gln Arg Ala Lys Leu Arg Asp Lys Glu Trp					
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<211> 3002

<212> DNA

<213> Homo sapiens

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<211> 387
 <212> PRT
 <213> Homo sapiens

<400> 6020

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      35           40           45
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His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
65           70           75           80
Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
      85           90           95
Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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Gly Thr Ser Gly Lys Val His Ala Met Ser Asn Trp Val Cys Tyr Leu
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Cys Leu Pro Ser Ser Arg Ser Gly Leu Leu Gln Arg Arg Arg Lys Trp
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Arg Ser Gln Leu Lys Ala Phe Tyr Asp Arg Glu Ser Glu Asn Pro Leu
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Glu Met Phe Glu Thr Val Pro Val Trp Arg Arg Gln Pro Val Arg Val
      180          185          190
Leu Ser Leu Phe Glu Asp Ile Lys Lys Glu Leu Thr Ser Leu Gly Phe
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Leu Glu Ser Gly Ser Asp Pro Gly Gln Leu Lys His Val Val Asp Val
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Thr Asp Thr Val Arg Lys Asp Val Glu Glu Trp Gly Pro Phe Asp Leu
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Ser Trp Tyr Leu Phe Gln Phe His Arg Phe Leu Gln Tyr Ala Arg Pro
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Val Arg Val Trp Ser Asn Ile Pro Ala Ile Arg Ser Ser Arg His Trp
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<211> 3145

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6022

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Leu Arg Ser Pro Arg Lys Pro Thr Arg Lys Ile Ser Lys Ile Pro Phe			
165	170	175	
Lys Val Leu Asp Ala Pro Glu Leu Gln Asp Asp Phe Tyr Leu Asn Leu			
180	185	190	
Val Asp Trp Ser Ser Leu Asn Val Leu Ser Val Gly Leu Gly Thr Cys			
195	200	205	
Val Tyr Leu Trp Ser Ala Cys Thr Ser Gln Val Thr Arg Leu Cys Asp			
210	215	220	
Leu Ser Val Glu Gly Asp Ser Val Thr Ser Val Gly Trp Ser Glu Arg			
225	230	235	240
Gly Asn Leu Val Ala Val Gly Thr His Lys Gly Phe Val Gln Ile Trp			
245	250	255	
Asp Ala Ala Ala Gly Lys Lys Leu Ser Met Leu Glu Gly His Thr Ala			
260	265	270	
Arg Val Gly Ala Leu Ala Trp Asn Ala Glu Gln Leu Ser Ser Gly Ser			
275	280	285	
Arg Asp Arg Met Ile Leu Gln Arg Asp Ile Arg Thr Pro Pro Leu Gln			
290	295	300	
Ser Glu Arg Arg Leu Gln Gly His Arg Gln Glu Val Cys Gly Leu Lys			
305	310	315	320
Trp Ser Thr Asp His Gln Leu Leu Ala Ser Gly Gly Asn Asp Asn Lys			
325	330	335	
Leu Leu Val Trp Asn His Ser Ser Leu Ser Pro Val Gln Gln Tyr Thr			
340	345	350	
Glu His Leu Ala Ala Val Lys Ala Ile Ala Trp Ser Pro His Gln His			
355	360	365	
Gly Leu Leu Ala Ser Gly Gly Gly Thr Ala Asp Arg Cys Ile Arg Phe			
370	375	380	
Trp Asn Thr Leu Thr Gly Gln Pro Leu Gln Cys Ile Asp Thr Gly Ser			
385	390	395	400
Gln Val Cys Asn Leu Ala Trp Ser Lys His Ala Asn Glu Leu Val Ser			
405	410	415	
Thr His Gly Tyr Ser Gln Asn Gln Ile Leu Val Trp Lys Tyr Pro Ser			
420	425	430	
Leu Thr Gln Val Ala Lys Leu Thr Gly His Ser Tyr Arg Val Leu Tyr			

435 440 445
 Leu Ala Met Ser Pro Asp Gly Glu Ala Ile Val Thr Gly Ala Gly Asp
 450 455 460
 Glu Thr Leu Arg Phe Trp Asn Val Phe Ser Lys Thr Arg Ser Thr Lys
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 Val Lys Trp Glu Ser Val Ser Val Leu Asn Leu Phe Thr Arg Ile Arg
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<210> 6027
 <211> 305
 <212> DNA
 <213> Homo sapiens

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 180
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 305

<210> 6028
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 6028
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 Glu Val Phe Arg Thr Arg Ile Glu Ala Ala Thr Gln Met Glu Ser Gly
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 Leu Gly Ala Ala Gly Lys Pro Asn Cys Leu Val Ile Asp Glu Ile Asp
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 Gly Ala Pro Val Val Gly Ser Leu Met Pro Gly
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 <212> DNA
 <213> Homo sapiens

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 120

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 480
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 660
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 780
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 960
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 1200
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<210> 6030

<211> 99

<212> PRT

<213> Homo sapiens

<400> 6030

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 Met Trp Ala Glu Leu Arg Ala Ala His Pro Arg Trp Leu His Ile
 20 25 30
 His Thr Gly Thr Ser His Pro Pro Arg Phe Gly Leu Ala Glu Thr Ser

35	40	45
Phe His Ser Ser Lys Ala Ser Met Val Phe Ala Ser Pro Gln Glu Val		
50	55	60
Ser Gln Glu Glu Phe Leu Asp Gly Val Leu Met Ser Ala Glu Asn Ser		
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Ala Pro Ser		

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 <211> 1316
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 taccactca ccttgtttgt cccaggactc ctctatctcc tccagcggca gtacatacct
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 600
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 660
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 720
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 1140

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<210> 6032

<211> 321

<212> PRT

<213> Homo sapiens

<400> 6032

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			20					25					30		
Asn	Pro	Tyr	Thr	Ile	Leu	Ser	Cys	Val	Ala	Lys	Ser	Thr	Cys	Ala	Ile
		35				40						45			
Asn	Asn	Thr	Leu	Ile	Ala	Phe	Phe	Ile	Leu	Thr	Thr	Ile	Lys	Gly	Ser
	50					55				60					
Ala	Phe	Leu	Ser	Ala	Ile	Phe	Leu	Ala	Leu	Ala	Thr	Tyr	Gln	Ser	Leu
65					70					75				80	
Tyr	Pro	Leu	Thr	Leu	Phe	Val	Pro	Gly	Leu	Leu	Tyr	Leu	Leu	Gln	Arg
			85						90				95		
Gln	Tyr	Ile	Pro	Val	Lys	Met	Lys	Ser	Lys	Ala	Phe	Trp	Ile	Phe	Ser
			100					105					110		
Trp	Glu	Tyr	Ala	Met	Met	Tyr	Val	Gly	Ser	Leu	Val	Val	Ile	Ile	Cys
	115					120						125			
Leu	Ser	Phe	Phe	Leu	Leu	Ser	Ser	Trp	Asp	Phe	Ile	Pro	Ala	Val	Tyr
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Gly	Phe	Ile	Leu	Ser	Val	Pro	Asp	Leu	Thr	Pro	Asn	Ile	Gly	Leu	Phe
145					150					155				160	
Trp	Tyr	Phe	Phe	Ala	Glu	Met	Phe	Glu	His	Phe	Ser	Leu	Phe	Phe	Val
			165					170					175		
Cys	Val	Phe	Gln	Ile	Asn	Val	Phe	Phe	Tyr	Thr	Ile	Pro	Leu	Ala	Ile
			180					185					190		
Lys	Leu	Lys	Glu	His	Pro	Ile	Phe	Phe	Met	Phe	Ile	Gln	Ile	Ala	Val
	195					200						205			
Ile	Ala	Ile	Phe	Lys	Ser	Tyr	Pro	Thr	Val	Gly	Asp	Val	Ala	Leu	Tyr
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Met	Ala	Phe	Phe	Pro	Val	Trp	Asn	His	Leu	Tyr	Arg	Phe	Leu	Arg	Asn
225					230					235				240	
Ile	Phe	Val	Leu	Thr	Cys	Ile	Ile	Ile	Val	Cys	Ser	Leu	Leu	Phe	Pro
			245						250					255	
Val	Leu	Trp	His	Leu	Trp	Ile	Tyr	Ala	Gly	Ser	Ala	Asn	Ser	Asn	Phe
			260					265					270		
Phe	Tyr	Ala	Ile	Thr	Leu	Thr	Phe	Asn	Val	Gly	Gln	Ile	Leu	Leu	Ile
	275						280					285			
Ser	Asp	Tyr	Phe	Tyr	Ala	Phe	Leu	Arg	Arg	Glu	Tyr	Tyr	Leu	Thr	His
	290					295					300				
Gly	Leu	Tyr	Leu	Thr	Ala	Lys	Asp	Gly	Thr	Glu	Ala	Met	Leu	Val	Leu
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Lys															

<210> 6033
<211> 5157
<212> DNA
<213> Homo sapiens

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<210> 6034

<211> 1096

<212> PRT

<213> Homo sapiens

<400> 6034

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		20					25					30			
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Thr	Thr	Ser	Thr	Thr	Pro	Ala	Thr	Asn	Thr	Thr	Cys	Thr	Ala	Thr	Val
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Pro	Pro	Gln	Pro	Gln	Tyr	Ser	Tyr	His	Asp	Ile	Asn	Val	Tyr	Ser	Leu
65				70					75					80	
Ala	Gly	Leu	Ala	Pro	His	Ile	Thr	Leu	Asn	Pro	Thr	Ile	Pro	Leu	Phe
				85					90					95	
Gln	Ala	His	Pro	Gln	Leu	Lys	Gln	Cys	Val	Arg	Gln	Ala	Ile	Glu	Arg
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Ala	Met	Thr	Thr	Cys	Glu	Gln	Ile	Val	Arg	Lys	Asp	Phe	Ala	Leu	Asp
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Ser	Glu	Glu	Ser	Arg	Met	Arg	Ile	Ala	Ala	His	His	Met	Met	Arg	Asn
				150						155				160	
Leu	Thr	Ala	Gly	Met	Ala	Met	Ile	Thr	Cys	Arg	Glu	Pro	Leu	Leu	Met
			165						170					175	
Ser	Ile	Ser	Thr	Asn	Leu	Lys	Asn	Ser	Phe	Ala	Ser	Ala	Leu	Arg	Thr
			180					185					190		
Ala	Ser	Pro	Gln	Gln	Arg	Glu	Met	Met	Asp	Gln	Ala	Ala	Ala	Gln	Leu
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Ala	Gln	Asp	Asn	Cys	Glu	Leu	Ala	Cys	Cys	Phe	Ile	Gln	Lys	Thr	Ala
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Lys Val Gly Gly Val Asp Pro Lys Gln Leu Ala Val Tyr Glu Glu Phe
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Ala Arg Asn Val Pro Gly Phe Leu Pro Thr Asn Asp Leu Ser Gln Pro
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Thr Gly Phe Leu Ala Gln Pro Met Lys Gln Ala Trp Ala Thr Asp Asp
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Val Ala Gln Ile Tyr Asp Lys Cys Ile Thr Glu Leu Glu Gln His Leu
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His Ala Ile Pro Thr Leu Ala Met Asn Pro Gln Ala Gln Ala Leu
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Arg Ser Leu Leu Glu Val Val Val Leu Ser Arg Asn Ser Arg Asp Ala
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Ile Ala Ala Leu Gly Leu Leu Gln Lys Ala Val Glu Gly Leu Leu Asp
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Ala Thr Ser Gly Ala Asp Ala Asp Leu Leu Leu Arg Tyr Arg Glu Cys
385          390          395          400
His Leu Leu Val Leu Lys Ala Leu Gln Asp Gly Arg Ala Tyr Gly Ser
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Pro Trp Cys Asn Lys Gln Ile Thr Arg Cys Leu Ile Glu Cys Arg Asp
          420          425          430
Glu Tyr Lys Tyr Asn Val Glu Ala Val Glu Leu Leu Ile Arg Asn His
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Leu Val Asn Met Gln Gln Tyr Asp Leu His Leu Ala Gln Ser Met Glu
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Asn Gly Leu Asn Tyr Met Ala Val Ala Phe Ala Met Gln Leu Val Lys
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Ile Leu Leu Val Asp Glu Arg Ser Val Ala His Val Thr Glu Ala Asp
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Leu Phe His Thr Ile Glu Thr Leu Met Arg Ile Asn Ala His Ser Arg
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Gly Asn Ala Pro Glu Gly Leu Pro Gln Leu Met Glu Val Val Arg Ser
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Met His Ser Gly Ile Ser Gln Ala Ser Glu Tyr Asp Asp Pro Pro Gly
545          550          555          560
Leu Arg Glu Lys Ala Glu Tyr Leu Leu Arg Glu Trp Val Asn Leu Tyr
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His Ser Ala Ala Ala Gly Arg Asp Ser Thr Lys Ala Phe Ser Ala Phe
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Val Gly Gln Val Glu Leu Leu Glu Arg Lys Met His Gln Gln Gly Ile
          595          600          605
Leu Lys Thr Asp Asp Leu Ile Thr Arg Phe Phe Arg Leu Cys Thr Glu
          610          615          620
Met Cys Val Glu Ile Ser Tyr Arg Ala Gln Ala Glu Gln Gln His Asn
625          630          635          640
Pro Ala Ala Asn Pro Thr Met Ile Arg Ala Lys Cys Tyr His Asn Leu
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Asp Ala Phe Val Arg Leu Ile Ala Leu Leu Val Lys His Ser Gly Glu

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Phe	Gln	Gln	Leu	Pro	Tyr	His	Arg	Ile	Phe	Ile	Met	Leu	Leu	Leu	Glu															
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Gly	Phe	Val	Tyr	Ala	Trp	Leu	Glu	Leu	Ile	Ser	His	Arg	Ile	Phe	Ile															
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Arg	Val	Leu	Leu	Val	Leu	Leu	His	Asp	Phe	Pro	Glu	Phe	Leu	Cys	Asp															
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Tyr	His	Tyr	Gly	Phe	Cys	Asp	Val	Ile	Pro	Pro	Asn	Cys	Ile	Gln	Leu															
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Lys	Lys	Asp	Leu	Asp	Ser	Tyr	Leu	Lys	Thr	Arg	Ser	Pro	Val	Thr	Phe															
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 <211> 320
 <212> DNA
 <213> Homo sapiens

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<210> 6036
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 6036
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 Arg Gln Val Leu Gln Glu Pro Ser Arg Glu Pro Pro Gly Trp Leu Gly
 35 40 45
 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met
 50 55 60
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln
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 <212> DNA
 <213> Homo sapiens

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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
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Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
	50					55				60					
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
			85					90					95		
Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
	100						105					110			
Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
	115					120					125				
Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
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Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
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Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
		165						170				175			
Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
	180						185				190				
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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 <211> 1130
 <212> DNA
 <213> Homo sapiens

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<210> 6040
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 6040
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Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
      65      70      75      80
Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
      85      90      95
Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
      100      105      110
Gly Gln Val Phe Ser Trp Gly Gly Gly Arg His Gly Gln Leu Gly His
      115      120      125
Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
      130      135      140
Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
      145      150      155      160
Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
      165      170      175
Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
      180      185      190
Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
      195      200      205
Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
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Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
      225      230      235      240
Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
      245      250      255
Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
      260      265      270
Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
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 <211> 291
 <212> DNA
 <213> Homo sapiens

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<210> 6042

<211> 97

<212> PRT

<213> Homo sapiens

<400> 6042

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Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
      35             40             45
Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
      50             55             60
Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
65             70             75             80
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<210> 6043

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<212> DNA

<213> Homo sapiens

<400> 6043

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240
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<210> 6044

<211> 152

<212> PRT

<213> Homo sapiens

<400> 6044

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Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20           25           30
Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35           40           45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50           55           60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65           70           75           80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85           90           95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
100           105           110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
115           120           125
Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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420
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540
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600
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660
gagatgcccg cagagggcaa ggcagagcgc aagccccatg actgtgagtc ctctactgtt
720
agtgaggaag actacttcag cagccacagg gacgagctcc agagcagaaa ggccattgac
780

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gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgaggtggga
 840
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 900
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 960
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 1020
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20					25					30		
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
		35				40					45				
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50				55					60					
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

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Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile
      85          90          95
Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys
      100        105        110
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
      115        120        125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
      130        135        140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
      145        150        155        160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
      165        170        175
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
      180        185        190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
      195        200        205
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
      210        215        220
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
      225        230        235        240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
      245        250        255
Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
      260        265        270
Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
      275        280        285
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
      290        295        300
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
      305        310        315        320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
      325        330        335
Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu Lys Ser Ser Ser Ser
      340        345        350
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
      355        360        365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
      370        375        380
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
      385        390        395        400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
      405        410        415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
      420        425        430
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg
      435        440        445
Asp Val Ala Leu Tyr Pro Ser Tyr Gln
      450        455

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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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 120
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 180
 gaggatgggg caagggatcc ggtgtccaac tctgtgtgtc cctgcagctc ccgtagccca
 240
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 300
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 360
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 420
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 600
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 660
 tgggcccaga ggtgccccg gcttctctgg ccatgaccca cctctctgga cacagccgct
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<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
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 20 25 30
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
 35 40 45
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
 85 90 95
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
 100 105 110
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
 115 120 125
 Asp

<210> 6049
 <211> 479
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
 gaagacaccc tggagtgtgt aggggtttgat gcgaagatgg ctgaggaatc ctctctctcc
 360
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<210> 6050
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 6050
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 Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Ser Asn Ser
 35 40 45
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
 50 55 60
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
 65 70 75 80
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
 85 90 95
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
 100 105 110
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
 115 120 125
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser
 130 135 140
 Ser Val Gly Ser Val His Ala Asp Gly Leu Ala Glu Ser Ser
 145 150 155

<210> 6051
 <211> 2404
 <212> DNA
 <213> Homo sapiens

<400> 6051
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120
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180
gaacttcttg cacagccaca ggttatgaaa ttattagatt cactccgaga gcaatatacc
240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
aaggtaatgc aggtgggtgaa ctggctagaa gggcctggat cagaacaact aagagcccag
360
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420
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 1860
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<210> 6052

<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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		20					25						30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
		35					40					45			
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
	50					55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
65				70					75					80	
Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
			85					90					95		
Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
		100					105					110			
Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
	115					120					125				
Ala	Ser	Gln	Ala	Leu	Gln	Gln	Lys	His	Glu	Glu	Ile	Glu	Ser	Gln	His

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Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala
145              150              155              160
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu
      165              170              175
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu
      180              185              190
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala
      195              200              205
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val
      210              215              220
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu
      225              230              235              240
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg
      245              250              255
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa
      260              265              270
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp
      275              280              285
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys
      290              295              300
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln
      305              310              315              320
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser
      325              330              335
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp
      340              345              350
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp
      355              360              365
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr
      370              375              380
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp
      385              390              395              400
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser
      405              410              415
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn
      420              425              430
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn
      435              440              445
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu
      450              455              460
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr
      465              470              475              480
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp
      485              490              495
Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu
      500              505              510
Met Val Thr Thr Glu Ser
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<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

<400> 6053

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<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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<213> Homo sapiens

<400> 6055

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<213> Homo sapiens

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Val Ser Lys Arg Lys Cys Ile Val Trp Gly Val Ala Phe Leu Ser Asp
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<210> 6057

<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<210> 6060
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 6060
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 Ile Ser Tyr Thr Ile Thr Ile Phe Gly Asn Val Ser Ile Met Met Val
 35 40 45
 Cys Ile Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr
 50 55 60
 Asn Leu Ser Ile Leu Asp Leu Cys Tyr Thr Thr Thr Val Pro His
 65 70 75 80
 Met Leu Val Asn Ile Gly Cys Asn Lys Lys Thr Ile Ser Tyr Ala Gly
 85 90 95
 Cys Val Ala His Leu Ile Ile Phe Leu Ala Leu Gly Ala Thr Glu Cys
 100 105 110
 Leu Leu Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys Arg
 115 120 125
 Pro Leu His Tyr Val Val Ile Met Asn Tyr Trp Phe Cys Leu Arg Met
 130 135 140
 Ala Ala Phe Ser Trp Leu Ile Gly Phe Gly Asn Ser Val Leu Gln Ser
 145 150 155 160
 Ser Leu Thr Leu Asn Met Pro Arg Cys Gly His Gln Glu Val Asp His
 165 170 175
 Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
 180 185 190
 Lys Pro Ile Glu Ala Glu Leu Phe Phe Ser Val Leu Ile Leu Leu
 195 200 205
 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Gly Phe Ile Ala Gln Ala
 210 215 220
 Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr
 225 230 235 240
 Cys Gly Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Ile
 245 250 255
 Tyr Met Tyr Leu Gln Pro Pro Ser Ser Thr Ser Lys Asp Trp Gly Lys

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<210> 6061
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 <212> DNA
 <213> Homo sapiens

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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			20					25					30		
Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	Ile	Val	Asp
			35				40					45			
Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	Glu	Leu	Glu	Leu
	50					55					60				
Asp	Asp	Val	Val	Ile	Thr	Asn	Pro	His	Ile	Glu	Ala	Ile	Leu	Glu	Asn
65					70				75					80	
Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
			85					90					95		
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
			100					105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
			115				120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
			130			135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
145					150				155					160	
Ala	Leu	Leu	Leu	Ser	Val	Ser	His	Leu	Val	Leu	Val	Thr	Arg	Asn	Ala
				165				170					175		
Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
			180					185					190		
Ala	Glu	Glu	His	Leu	Glu	Val	Leu	Arg	Glu	Ala	Ala	Leu	Ala	Ser	Glu
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<210> 6064

<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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		20					25					30			
Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
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	50				55					60					
Thr	Ala	His	Tyr	Asp	Pro	Gly	His	Cys	Phe	Ala	Glu	Ser	Arg	Glu	Leu
65					70					75				80	
Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
			85					90					95		
Gly	Arg	Gly	Ala	Ala	Val	Cys	Ala	Tyr	Val	Arg	Met	Val	Phe	Leu	Ala
		100						105				110			
Leu	Tyr	Val	Leu	Phe	Leu	Ala	Asp	Glu	Glu	Phe	Asp	Val	Val	Val	Cys
	115					120					125				
Asp	Gln	Val	Ser	Ala	Cys	Ile	Pro	Val	Phe	Arg	Leu	Ala	Arg	Arg	Arg
	130					135					140				
Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys

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Arg	Asp	Ser	Phe	Leu	Lys	Arg	Leu	Tyr	Arg	Ala	Pro	Ile	Asp	Trp	Ile	
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Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln	
					180						185					
Phe	Thr	Ala	Ala	Val	Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile	
					195						200					
Asp	Pro	Asp	Val	Leu	Tyr	Pro	Ser	Leu	Asn	Val	Thr	Ser	Phe	Asp	Ser	
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<210> 6065
<211> 2084
<212> DNA
<213> Homo sapiens
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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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Arg	Val	Leu	Arg	Gly	Val	Asp	Asp	Leu	Asp	Phe	Phe	Ile	Gly	Asp	Glu
		20						25					30		
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40				45				
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50				55					60					
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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 35           40           45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
 50           55           60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
 65           70           75           80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
 85           90           95
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115

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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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120
ctggagtact gtatcatggt cattgggggc cccaacgtgg gcaagtcctc cctcatcaac
180

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20					25						30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35				40					45				
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
	50					55					60				
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<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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<213> Homo sapiens

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 Ile Val Ile Asn Lys Lys Gln Leu Gln Leu Gly Lys Thr Leu Glu Glu
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<400> 6077

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<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
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Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
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Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
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Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
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Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
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Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
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Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

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 <213> Homo sapiens

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 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
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			20					25					30		
Val	Ile	Pro	Leu	Glu	Asp	Pro	Leu	Gly	Pro	Ala	Val	Ile	Thr	Leu	Leu
		35					40					45			
Leu	Asp	Glu	Cys	Pro	Leu	Pro	Thr	Lys	Asp	Ala	Leu	Gln	Lys	Leu	Thr
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          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
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<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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<213> Homo sapiens

<400> 6084

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20      25      30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
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Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
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Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
			35				40					45			
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
			50			55					60				
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
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 Gly Lys Val Tyr Gln Val Phe Glu Ser Val Ala Lys Lys Tyr Asp Val
 65 70 75 80
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 100 105 110
 Ala Gly Gly Thr Gly Asp Ile Ala Phe Arg Phe Leu Asn Tyr Val Gln
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 Ser Gln His Gln Arg Lys Gln Lys Arg Gln Leu Arg Ala Gln Gln Asn
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 145 150 155 160
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 Ala Trp Val Leu Gly Asp Ala Glu Glu Leu Pro Phe Asp Asp Asp Lys
 195 200 205
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 260 265 270
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 Arg Phe Pro Ser Gln Glu Glu Phe Lys Asp Met Ile Glu Asp Ala Gly
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325

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5269

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<210> 6090

<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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 20 25 30
 Glu Asp Cys Thr Trp Met Gln Glu Tyr Asn Pro Pro Thr Phe Glu Thr

35	40	45
Phe Tyr Gln Arg Phe Arg His Phe Gln Tyr His Glu Ala Ser Gly Pro		
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Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp Leu Arg		
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Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu		
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Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu		
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His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile		
	115	120
Gln Arg Glu Leu Glu Glu Arg Gln Gln Ile Val Ala Cys Pro Asp		
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Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys		
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Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln		
	165	170
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro		
	180	185
Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser		
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Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala		
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Val Ser Phe Ile Leu Glu Trp Gly His Leu Asp Gln Ser Gln Lys		
225	230	235
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser		
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Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile		
	260	265
Ser Asp Asp Ser Glu Ser His Trp Val Ala Pro Glu His Thr Glu Arg		
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Ser Val Pro Gln Asp Pro Asp Phe Ala Glu Val Ser Asp Leu Lys Gly		
	290	295
Met Val Gln Arg Trp Gln Val Asn Pro Thr Val Gly Lys Ser Arg Gln		
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Asn Pro Ser Gln Lys Arg Asp Leu Asp Ala Ile Thr Asp Ile Ser Pro		
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Lys Gln Ser Thr His Gly Glu Arg Gly His Arg Cys Ser Asp Cys Gly		
	340	345
Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His		
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Thr Gly Glu Lys Pro Phe Lys Cys Gly Glu Cys Gly Lys Ser Tyr Asn		
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Gln Arg Val His Leu Thr Gln His Gln Arg Val His Thr Gly Glu Lys		
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Pro Tyr Lys Cys Gln Val Cys Gly Lys Ala Phe Arg Val Ser Ser His		
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Leu Val Gln His His Ser Val His Ser Gly Glu Arg Pro Tyr Gly Cys		
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Asn Glu Cys Gly Lys Asn Phe Gly Arg His Ser His Leu Ile Glu His		
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Leu Lys Arg His Phe Arg Glu Lys Ser Gln Arg Cys Ser Asp Lys Arg		
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Ser Lys Asn Thr Lys Leu Ser Val Lys Lys Lys Ile Ser Glu Tyr Ser		

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 Val Gln Asp Phe Gly Glu Gly Cys Glu Phe Gln Gly Lys Leu Asp Arg
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 Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
 515 520 525
 Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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 Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
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 Ser Ala His Leu Ile Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
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 595 600 605
 Leu Cys Gly Lys Ala Phe Arg Val Arg Ser His Leu Val Gln His Gln
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 Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
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 675 680 685
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 690 695 700
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 705 710 715 720
 Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
 725 730 735
 Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
 740 745 750
 Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
 755 760 765
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 Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
 785 790 795 800
 Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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 Ser Val Glu Gly Ser Leu Leu
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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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480
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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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      20           25           30
Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp
      35           40           45
Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
      50           55           60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
      65           70           75           80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
      85           90           95
Gly Gln Gln Leu Gln Leu His Leu Leu Pro Ala Leu Lys Gly Ser Phe
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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960

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<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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		20					25					30			
Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
	35					40					45				
Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
	50			55				60							
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65			70					75					80		
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

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Pro Asp Ser Arg Gly Thr Ser Ser Leu His Arg Ala Ala Ala Ala Gly
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<210> 6095
 <211> 441
 <212> DNA
 <213> Homo sapiens

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<210> 6096
 <211> 97
 <212> PRT
 <213> Homo sapiens

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<400> 6096
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      20              25              30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35              40              45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
      50              55              60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
65              70              75              80
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
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Lys

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<210> 6097
 <211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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240
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<210> 6098

<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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		20					25					30			
Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
	35						40				45				
Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
	50				55					60					
Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
65				70					75				80		
Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
		85					90				95				
His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
	100						105				110				
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

465 470 475 480
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 485 490 495
 Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly
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 Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro
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 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
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 Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg
 545 550 555 560
 Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala
 565 570 575
 Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln
 580 585 590
 Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile
 595 600 605
 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln
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 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile
 630 635 640
 Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln
 645 650 655
 Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser
 660 665 670
 Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser
 675 680 685
 Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala
 690 695 700
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 Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala
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 770 775 780
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 His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr
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 Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val
 850 855 860
 Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln
 865 870 875 880
 Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro
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 Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

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 Gly Leu Leu Ser Pro Arg His Ser Leu Thr Gly ~~His Ser Asn~~ Ile Arg
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 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln Gln
 930 935 940
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Tyr Gln Glu Leu
 945 950 955 960
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu
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 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala
 980 985 990
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln
 995 1000 1005
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser
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 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly
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 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu
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 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn
 1060 1065 1070
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<210> 6101
 <211> 1447
 <212> DNA
 <213> Homo sapiens

<400> 6101
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 480
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 1320
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 1447

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 <211> 123
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu
 50 55 60
 Ser Arg Arg Val Asp Gly Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly
 65 70 75 80
 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala
 85 90 95
 Val Glu Pro Asp Leu Leu Arg Ser Val Leu Gln Gln Arg Leu Ile Ala
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<210> 6103
 <211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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 Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
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 Gly Leu Gly Met Arg Tyr Ala
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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 35           40           45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
 50           55           60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
 65           70           75           80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
 85           90           95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
100           105           110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
115           120           125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
130           135           140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145           150           155           160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
165           170           175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
180           185           190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
195           200           205
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210           215           220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225           230           235           240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
245           250           255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
260           265           270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
275           280           285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
290           295           300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305           310           315           320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
325           330           335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
340           345           350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
355           360           365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 20 25 30
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
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<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
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Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
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Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
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 195 200 205
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 Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly
 245 250 255
 Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser
 260 265 270
 Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu
 275 280 285
 Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys
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<210> 6111
 <211> 1706
 <212> DNA
 <213> Homo sapiens

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 gctgtgtcac tctctctccc cccagtgct ttgtagtctc tcttatgtca taataaagct
 1680
 acattttctc tgaaaaaaaa aaaaaa
 1706

<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
		20						25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35				40					45				
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65				70					75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
			85					90					95		
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 6113

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120
acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa
180
aggcctagta agtggggctg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc
240
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300
atacgcgtag gccttgcccc tatttcctgg tagaaccgag agttggaagt ccctacggcg
360
atcatgttaa ccgcgcgggc tcattctgcg gaacgaagcc gggcagaggg tggggaagac
420
taggctagat tttcgtaagg aagcagcgtc tgagccaggt ttgaggccca atattttctt
480
tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgctctcc agactcagtg
540
ttcctctcct gccttatgat tcgtgctggt tgacacgaag tggttgtcgt tttgtgtctc
600
atacgctggt gtgtatgac ccattctaatt attgtgaggg taagtgcagg gaattttgac
660
tcattctggt atctactgaa ttaattctc tgggatttga aagtagcacg tatgtttgca
720
ttaggcattt cgcattagac ttaacgcttag gtttggtagc caataacaca agaaaaggat
780
ataactccat agtgcgttaa ccagaaacta atcatttggg ttaacagatt tgtgatgtgt
840
ttctttgtag agttaagaa agcaagtaaa cgcacgacct gccataagcg gtataaaatc
900
caaaaaaagg ttcgagaaca tcacgaaaa ttaagaaagg aggctaaaaa gcggggtcac
960
aagaagccta ggaaagaccc aggagtcca aacagtgtc cctttaagga ggctcttctt
1020
gaggaagctg agctaaggaa acagaggctt gaagaactaa aacagcagca gaaacttgac
1080
aggcagaagg aacta
1095

<210> 6114

<211> 87

<212> PRT

<213> Homo sapiens

<400> 6114

Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

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      1             5             10             15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
      85

```

<210> 6115
 <211> 411
 <212> DNA
 <213> Homo sapiens

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<400> 6115
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120
actgtggcgt ccagggcg tggaggagc aacttcgggg gcacgtcctc gtaaatcccg
180
tggaggacac tgacctgta cccaccctc gaggccagaa gtcggttctt ttgggggaac
240
tgaaggcgga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg
300
ggattctgcg catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

```

<210> 6116
 <211> 129
 <212> PRT
 <213> Homo sapiens

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<400> 6116
Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
      1             5             10             15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

```

115 120 125

Arg

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 60
 gtggaagacg gagaggaaac ctgcgccctg gcctctcact ccgggagctc aggctccaag
 120
 tcgggaggcg acaagatggt ctccctcaag aagtggaacg cgggtggccat gtggagctgg
 180
 gacgtggagt gcgatacgtg cgccatctgc aggggtccagg tgatggatgc ctgtcttaga
 240
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc
 300
 ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgtgccc tctctgccag
 360
 caggactggg tgggtccaaag aatcggaaca tgagagtggg tagaaggctt cttagcgag
 420
 ttgttcagag ccctgggtga tcttgaatc cagtgccta caaaggctag aacactacag
 480
 gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc
 540
 ttggttttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt
 600
 attaaagggtg gtccttccta cctctgtggt gtgtgtcgcg cacacagctt agaagtgcta
 660
 taataaaggga aagagctcca aattgaatca cctttataat ttaccattt ctatacaaca
 720
 ggcagtggaa gcagtttcag agaacttttt gcattgctat gggtgatcag ttaaaaaaga
 780
 atgttacagt aacaaataaa gtgcagttta aaacccaact cttactctta atttgttctt
 840
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat
 900
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 960
 aa
 962

<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
 Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
 1 5 10 15
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

```

      20      25      30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35      40      45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
      50      55      60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
      65      70      75      80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
      85      90      95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
      100      105      110
Lys

```

<210> 6119

<211> 375

<212> DNA

<213> Homo sapiens

<400> 6119

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ccccacacc ccacacggac tgcacggaaa taccacagta accatctctc agtcacagcg

120

tggccccaca gaactcatgc ctgcttgctt taaaccaccc aatgaaaact ccccatggga

180

aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc

240

tctgctcttc tcttgccctt acccactggg tgagcatgtg tgtcccaaac ggccctgcaa

300

gggtgtgctgc cctgttcttt ctgggctctg tcaaggaatc aaactgcttc tgttatgtga

360

tgtgtcatgt tgtgc

375

<210> 6120

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6120

Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His

1

Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser

20

Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn

35

Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn

50

Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro

65

Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys

85

Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
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ttgtaaacat tgatttgaat gatgacaaca ttgcagtggt ttgtaaactg ggaacagaca
120
aagaaacact ctccttctgc cacatttggt ttgagctaaa tattgagggg gtaccaaagt
180
ctgatctctt gcacaccaa tcatgaagg gccataaaga ctgctttgaa aaataccatt
240
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta
300
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360
attcagattc tgaatgttct aaaaagcccc agcatcatct gttaatttc aggcataagc
420
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaatgga
480
tagatggaag tgcaggtggc atctctaact gtacacaaag aattttggag cagagggaaa
540
atacagactt tggactttct atgttacaag attcaggtgc cactttatgt cgtaacagt
600
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag
660
aggctaagt ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt
720
taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgtg
780
ccatcgaaca gcttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag
840
gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgcctg
900
ccctttattg gtctcccaga catgcaaact ttgaagaagt ttgaagaaag ttgtgggccg
960
ttttttatg gtcattaaat ttgccaaaca taaggcagta ttaacatct ttgtcaata
1020
aagcagatca ttatactct
1039

<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

<400> 6122
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn

```

1           5           10           15
Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe
20           25           30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp
35           40           45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys
50           55           60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
65           70           75           80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
85           90           95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
100          105          110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
115          120          125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala
130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
165          170          175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
180          185          190
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala
195          200          205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu
210          215          220

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<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaacccac gtcgaggctc
180
ccaaacctgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
240
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300
ctgagacacc atctccagat tcccatccac ttccccaagg atttcttgtc tgtgatgctt
360
gaaaaaggaa gtttgtctgc catgcgtttc ctcaccgccc tgaacttgga gcatccagag
420
atgctggaga aagcgtcccc ggagctgtgg atgcgcgtct ggtcaagggt gagtgtgggg
480
ctctgggaat cctctgggag gaccttgat gactttctga ccttccccag gcacgttttc
540
agggtcatga tcctgcccc gcccggggga tctactgtcc tccagtcac acccctctcc
600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag
 660
 agcatcctgg cggctgcaga gaaggctggt atgtctgcag aacaagccca gggacttctg
 720
 gaaaagatcg caacgccaac ggtgaagaac cagctcaagg agaccactga ggcagcctgc
 780
 agatacggag cctttgggct gcccatcacc gtggcccatg tggatggcca aaccacatg
 840
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 900

<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

Xaa	His	Ala	Cys	Ile	Pro	Gln	Leu	Leu	Gly	Arg	Leu	Arg	Arg	Glu	Asn
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Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70					75					80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
			85					90						95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
			100					105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
	115						120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145				150					155					160	
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
			165					170						175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180					185						190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
	195					200						205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225				230						235				240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
			245					250					255		
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260					265						270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
	275					280						285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290

295

300

<210> 6125

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6125

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atgaaacagg acttagagga tgccagtaac aaggcggagg aggagagggc cgcctggag
120

ggagaattga aggggctgca ggagcaaata gcagaaacca aagcccggct tatcacgcag
180

cagcatgatc gggcccaaga gcagagtac catgccttga tgctgctga gctccagaag
240

ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagaccga
300

gaagccttgg caggacgagc atatgcagct gaacagatgg aaggatttga actgcagacc
360

aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag
420

aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc
468

<210> 6126

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6126

Xaa Thr Val Thr Gln Glu Lys Ser Arg Met Glu Ala Ser Tyr Leu Ala
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Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala
20 25 30

Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu
35 40 45

Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg
50 55 60

Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys
65 70 75 80

Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu
85 90 95

Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln
100 105 110

Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu
115 120 125

Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro
130 135 140

Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala
145 150 155

<210> 6127

<211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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120
cgggcaagag actccaatat ggtgagggcg gcagcagagc tggccctgag ctgcctgcct
180
cacgcccattg cattgaaccc taatgagatc cagcgggccc tgggtcagtg caaggaacag
240
gacaacctga tgttggagaa ggctgcatg gcagtggag aggcagctaa ggggtggggc
300
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360
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420
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480
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540
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600
tacactgctc tacagcccca cctgccctgt agccctcagt atctcactca cccagctcac
660
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720
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960
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1080
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1140
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1200
gcaaagctgg gagtgaacta cgtgcaccag ttctgtgtgg gggcagccaa gggggtgctg
1260
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1380
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1440
gtgaatgca tccggagtgc ccgcagcgcc ttctgctga cggccatggg catgatgcag
1500

ttcaacgaca tcctacagaa cctcaagcgc agcaaacaga ccaaggagct gtggcagcgg
 1560
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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro	Pro	Glu	Val
		20						25					30		
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<210> 6134

<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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Asn	Asn	Glu	Leu	Thr	Val	Asn	Glu	Gly	Glu	Ile	Ile	Thr	Ile	Thr	Asn
		20						25					30		
Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
		35					40					45			
Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
		50				55					60				
Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
65				70					75					80	
Asp	Ser	Leu	Ser	Ala	Ser	Thr	Ala	Gln	Ala	Ser	Ser	Ser	Ala	Ala	Ser
			85				90						95		
Asn	Asn	His	Gln	Val	Gly	Ser	Gly	Asn	Asp	Pro	Trp	Ser	Ala	Trp	Ser
		100					105					110			
Ala	Ser	Lys	Ser	Gly	Asn	Trp	Glu	Ser	Ser	Glu	Gly	Trp	Gly	Ala	Gln

115	120	125
Pro Glu Gly Ala Gly Ala Gln Arg Asn Thr Asn Thr Pro Asn Asn Trp		
130	135	140
Asp Thr Ala Phe Gly His Pro Gln Ala Tyr Gln Gly Pro Ala Thr Gly		
145	150	155
Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		
165	170	175
Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
180	185	190
Asn Ser Arg Ala Ser Ser Ser Ser Met Lys Ile Pro Leu Asn Lys Phe		
195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
340	345	350
Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

545 550 555 560
 Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln Val Gln
 565 570 575
 Phe Tyr Glu Thr Ile Ala Glu Lys Leu Arg Gln Ala Leu Ser Arg Phe
 580 585 590
 Pro Val Met
 595

<210> 6135

<211> 526

<212> DNA

<213> Homo sapiens

<400> 6135

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 180
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 240
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 300
 accattctca accacagcct tttgctggaa cagctggaag tttactctcc catctcttga
 360
 gtttagagca tgtaggaatt ttgcataagg attttgaatc tattttacca accaggaaga
 420
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 480
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 526

<210> 6136

<211> 105

<212> PRT

<213> Homo sapiens

<400> 6136

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 20 25 30
 Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His
 35 40 45
 Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
 50 55 60
 Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
 65 70 75 80
 Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala
 85 90 95
 Leu Val Lys Pro Ser Ala Ser Gln Tyr
 100 105

<210> 6137
<211> 2073
<212> DNA
<213> Homo sapiens

<400> 6137
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180
aggcctaagt taaagaaagc aagtaaagc atgacctgcc ataagcggta taaaatccaa
240
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300
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360
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420
cagaagggaac tagaaaagaa aagaaaactt gaaactaatc ctgatattaa gnccatcaaa
480
tgtggaacn ntatggaaaa ggagtttggg ctttgcaaaa ctgagaacaa agccaagtcg
540
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660
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720
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 1920
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 2040
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 2073

<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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Lys	Arg	Tyr	Lys	Ile	Gln	Lys	Lys	Val	Arg	Glu	His	His	Arg	Lys	Leu
			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
			35				40						45		
Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
			50				55					60			
Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
65					70					75				80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
				85					90					95	
Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
			100				105						110		
Leu	Cys	Lys	Thr	Glu	Asn	Lys	Ala	Lys	Ser	Gly	Lys	Gln	Asn	Ser	Lys
			115				120					125			
Lys	Leu	Tyr	Cys	Gln	Glu	Leu	Lys	Lys	Val	Ile	Glu	Ala	Ser	Asp	Val
			130				135				140				
Val	Leu	Glu	Val	Leu	Asp	Ala	Arg	Asp	Pro	Leu	Gly	Cys	Arg	Cys	Pro
145					150					155				160	
Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
				165					170					175	
Ile	Leu	Asn	Lys	Ser	Asp	Leu	Val	Pro	Lys	Glu	Asn	Leu	Glu	Ser	Trp
			180					185					190		
Leu	Asn	Tyr	Leu	Lys	Lys	Glu	Leu	Pro	Thr	Val	Val	Phe	Arg	Ala	Ser

195	200	205
Thr Lys Pro Lys Asp Lys Gly Lys Ile Thr Lys Arg Val Lys Ala Lys		
210	215	220
Lys Asn Ala Ala Pro Phe Arg Ser Glu Val Cys Phe Gly Lys Glu Gly		
225	230	235
Leu Trp Lys Leu Leu Gly Gly Phe Gln Glu Thr Cys Ser Lys Ala Ile		240
	245	250
Arg Val Gly Val Ile Gly Phe Pro Asn Val Gly Lys Ser Ser Ile Ile		255
260	265	270
Asn Ser Leu Lys Gln Glu Gln Met Cys Asn Val Gly Val Ser Met Gly		
275	280	285
Leu Thr Arg Ser Met Gln Val Val Pro Leu Asp Lys Gln Ile Thr Ile		
290	295	300
Ile Asp Ser Pro Ser Phe Ile Val Ser Pro Leu Asn Ser Ser Ser Ala		
305	310	315
Leu Ala Leu Arg Ser Pro Ala Ser Ile Glu Val Val Lys Pro Met Glu		320
	325	330
Ala Ala Ser Ala Ile Leu Ser Gln Ala Asp Ala Arg Gln Val Val Leu		335
340	345	350
Lys Tyr Thr Val Pro Gly Tyr Arg Asn Ser Leu Glu Phe Phe Thr Val		
355	360	365
Leu Ala Gln Arg Arg Gly Met His Gln Lys Gly Gly Ile Pro Asn Val		
370	375	380
Glu Gly Ala Ala Lys Leu Leu Trp Ser Glu Trp Thr Gly Ala Ser Leu		
385	390	395
Ala Tyr Tyr Cys His Pro Pro Thr Ser Trp Thr Pro Pro Pro Tyr Phe		
	405	410
Asn Glu Ser Ile Val Val Asp Met Lys Ser Gly Phe Asn Leu Glu Glu		415
420	425	430
Leu Glu Lys Asn Asn Ala Gln Ser Ile Arg Ala Ile Lys Gly Pro His		
435	440	445
Leu Ala Asn Ser Ile Leu Phe Gln Ser Ser Gly Leu Thr Asn Gly Ile		
450	455	460
Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro Lys Arg Lys Glu Arg		
465	470	475
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser Asp Gln Glu Thr Val		
	485	490
Asp Glu Glu Val Asp Glu Asn Ser Ser Gly Met Phe Ala Ala Glu Glu		495
500	505	510
Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr Ala Gly Glu Gln Ser Thr		
515	520	525
Arg Ser Phe Ile Leu Asp Lys Ile Ile Glu Glu Asp Asp Ala Tyr Asp		
530	535	540
Phe Ser Thr Asp Tyr Val		
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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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180
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240
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720
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 2249

<210> 6140

<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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Leu	Glu	Ser	Pro	Ile	Asp	Pro	Gln	Pro	Leu	Ser	Phe	Lys	Glu	Pro	Pro
			20					25					30		
Leu	Leu	Leu	Gly	Val	Leu	His	Pro	Asn	Thr	Lys	Leu	Arg	Gln	Ala	Glu
		35					40					45			
Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	Ile	Ala	His	Ile
		50				55					60				
Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	Arg	Val	Val	Lys	Leu
65					70					75				80	
Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	Phe	Xaa	Phe	Gly	Pro	Xaa
				85					90					95	
Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	Gly	Arg	Pro	Leu	Gly	Ile
			100					105					110		
Arg	Ala	Gly	Pro	Asn	Gly	Thr	Leu	Phe	Val	Ala	Asp	Ala	Tyr	Lys	Gly
		115				120					125				
Leu	Phe	Glu	Val	Asn	Pro	Trp	Lys	Arg	Glu	Val	Lys	Leu	Leu	Leu	Ser
		130				135					140				
Ser	Glu	Thr	Pro	Ile	Glu	Gly	Lys	Asn	Met	Ser	Phe	Val	Asn	Asp	Leu
145					150					155				160	
Thr	Val	Thr	Gln	Asp	Gly	Arg	Lys	Ile	Tyr	Phe	Thr	Asp	Ser	Ser	Ser
			165					170						175	
Lys	Trp	Gln	Arg	Arg	Asp	Tyr	Leu	Leu	Leu	Val	Met	Glu	Gly	Thr	Asp
		180					185						190		
Asp	Gly	Arg	Leu	Leu	Glu	Tyr	Asp	Thr	Val	Thr	Arg	Glu	Val	Lys	Val
		195				200					205				
Leu	Leu	Asp	Gln	Leu	Arg	Phe	Pro	Asn	Gly	Val	Gln	Leu	Ser	Pro	Ala

210	215	220
Glu Asp Phe Val Leu Val Ala Glu Thr Thr Met Ala Arg Ile Arg Arg		
225	230	235
Val Tyr Val Ser Gly Leu Met Lys Gly Gly Ala Asp Leu Phe Val Glu		240
	245	250
Asn Met Pro Gly Phe Pro Asp Asn Ile Arg Pro Ser Ser Ser Gly Gly		255
	260	265
Tyr Trp Val Gly Met Ser Thr Ile Arg Pro Asn Pro Gly Phe Ser Met		270
	275	280
Leu Asp Phe Leu Ser Glu Arg Pro Trp Ile Lys Arg Met Ile Phe Lys		285
	290	295
Gly Ser Cys Ala Gly Cys Asp Leu Leu Phe Ser Gln Glu Thr Val Met		300
305	310	315
Lys Phe Val Pro Arg Tyr Ser Leu Val Leu Glu Leu Ser Asp Ser Gly		320
	325	330
Ala Phe Arg Arg Ser Leu His Asp Pro Asp Gly Leu Val Ala Thr Tyr		335
	340	345
Ile Ser Glu Val His Glu His Asp Gly His Leu Tyr Leu Gly Ser Phe		350
	355	360
Arg Ser Pro Phe Leu Cys Arg Leu Ser Leu Gln Ala Val		365
370	375	380

<210> 6141
 <211> 5651
 <212> DNA
 <213> Homo sapiens

<400> 6141
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 120
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 720
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<211> 513
<212> PRT
<213> Homo sapiens

<400> 6142

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 35           40           45
Ser Pro Gly Arg Thr Glu Gln Pro Pro Pro Ser Pro Gln Ser Ser Ser
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Gly Phe Leu Tyr Arg Arg Leu Lys Thr Gln Glu Lys Arg Glu Met Gln
 65           70           75           80
Lys Glu Ile Leu Ser Val Leu Gly Leu Pro His Arg Pro Arg Pro Leu
 85           90           95
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 100          105          110
Gln Gln Gln Gln Gln Gln Leu Pro Arg Gly Glu Pro Pro Pro Gly Arg
 115          120          125
Leu Lys Ser Ala Pro Leu Phe Met Leu Asp Leu Tyr Asn Ala Leu Ser
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Ala Asp Asn Asp Glu Asp Gly Ala Ser Glu Gly Glu Arg Gln Gln Ser
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Trp Pro His Glu Ala Ala Ser Ser Ser Gln Arg Arg Gln Pro Pro Pro
 165          170          175
Gly Ala Ala His Pro Leu Asn Arg Lys Ser Leu Leu Ala Pro Gly Ser
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Gly Ser Gly Gly Ala Ser Pro Leu Thr Ser Ala Gln Asp Ser Ala Phe
 195          200          205
Leu Asn Asp Ala Asp Met Val Met Ser Phe Val Asn Leu Val Glu Tyr
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Asp Lys Glu Phe Ser Pro Arg Gln Arg His His Lys Glu Phe Lys Phe
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Arg Ile Tyr Lys Asp Cys Val Met Gly Ser Phe Lys Asn Gln Thr Phe
 260          265          270
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Trp Leu Glu Phe Asp Ile Thr Ala Thr Ser Asn Leu Trp Val Val Thr
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<213> Homo sapiens

<400> 6144

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Ser	Gly	Ser	Arg	Gln	Ala	Trp	Val	His	Pro	Pro	Ala	Gln	Pro	Arg
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Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys
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Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro
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Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly
			85					90					95	Pro
Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val
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Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly
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<212> DNA

<213> Homo sapiens

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 Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr
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<211> 410
 <212> PRT
 <213> Homo sapiens

<400> 6148

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Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
      50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
      65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
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Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
      100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
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Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
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      195          200          205
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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly Glu Thr Pro Leu Lys
      260              265              270
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu Leu Gly Lys Gly Thr
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Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser Ser Glu Glu Glu Asp
      290              295              300
Ala Pro Ser Phe Ala Pro Ser Ser Ser Val Asp Gly Asn Asn Thr Asp
305              310              315              320
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala Lys Asn Pro Glu Pro
      325              330              335
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr Glu Phe Asp Glu Asp
      340              345              350
Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp Lys His Leu Leu Lys
      355              360              365
Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser Phe Ile Ser Ile Pro
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Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn Thr Ile Ala Pro Lys
385              390              395              400
Lys Ala Ser His Arg Ile Leu Ser Asp Thr Ser Asp Glu Glu Asp Ala
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Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg Leu Ser Ala His Thr
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Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln
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Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys Lys Glu Thr Lys Gly
      450              455              460
Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser
465              470              475              480
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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240

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 <213> Homo sapiens

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 35 40 45
 Ala Gly Thr Val Asp Thr His Leu Pro Ser Leu Leu Leu Pro Val Ile
 50 55 60
 Leu His Pro Leu Gly Ala Ala Ser Ala Gly Arg Ala Leu Glu Pro Lys
 65 70 75 80
 Ala Asp Pro His Thr Cys Pro Tyr Gly Arg Lys Glu Ser Arg Gly Glu
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<210> 6153
 <211> 1810
 <212> DNA
 <213> Homo sapiens

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<210> 6154
 <211> 388
 <212> PRT
 <213> Homo sapiens

<400> 6154

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Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
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Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
 65           70           75           80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
 85           90           95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
 100          105          110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
 115          120          125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
 130          135          140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
 145          150          155          160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
 165          170          175
His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
 180          185          190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
 195          200          205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
 210          215          220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
 225          230          235          240
Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
 245          250          255
Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
 260          265          270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
 275          280          285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
 290          295          300
Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
 305          310          315          320
Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
 325          330          335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
 340          345          350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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375

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<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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	35		40		45										
Met	Thr	Leu	Ala	Asp	Gly	Arg	Val	Val	Leu	Ala	Leu	Glu	Gly	Gly	His
	50		55		60										
Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Asn	Ala	Leu
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Leu	Gly	Asn	Glu	Leu	Glu	Pro	Leu	Ala	Glu	Asp	Ile	Leu	His	Gln	Ser
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Pro	Asn	Met	Asn	Ala	Val	Ile	Ser	Leu	Gln	Lys	Ile	Ile	Glu	Ile	Gln
	100				105								110		
Lys	Leu	Leu	Val	Ser	Leu	Trp	Lys	Arg	Ser	Gln	Pro	Cys	Glu	Val	Pro
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Ser	Pro	Pro	Leu	Ile	Phe	Pro	Val	Cys	Asp	Ile	Ile	Val	Tyr	Pro	Pro
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Thr	Pro	Val	Pro	Ser	Asp	Met	Ser	Cys	Leu	Leu	Pro	Gly	Trp	His	Arg
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<210> 6157

<211> 2135

<212> DNA

<213> Homo sapiens

<400> 6157

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840

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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Ala	Val	Leu	His	Asp	Gly	Arg	Thr	Val	Ala	Val	Lys	Val	Gln	His	Pro				
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Lys	Val	Arg	Ala	Gln	Ser	Ser	Lys	Asp	Ile	Leu	Leu	Met	Glu	Val	Leu				
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<211> 4310

<212> DNA

<213> Homo sapiens

<400> 6159

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<210> 6160

<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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Glu																	

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Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser				
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Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr				
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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 <211> 713
 <212> DNA
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 <212> PRT
 <213> Homo sapiens

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 50 55 60
 Ser Ser Leu Leu Lys Cys Thr Arg Arg Cys Met Arg Gly Phe Arg Leu
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 Pro Glu Lys Gln Pro Ser Lys Thr Arg Val Ser Phe Leu Glu Ser Lys
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 <211> 1004
 <212> DNA
 <213> Homo sapiens

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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
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Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
			20					25					30		
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40					45			
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55					60				
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65					70				75						80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
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<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

Met Met Gln Glu Ser Gly Thr Glu Thr Lys Ser Asn Gly Ser Ala Ile

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Arg Glu Gly Arg Ser Asn Gly Glu Thr Pro Ala Val Asp Ile Gly Ala
      35           40           45
Ala Asp Leu Ala His Ala Gln Gln Gln Gln Gln Trp His Leu Ile
      50           55           60
Asn His Gln Pro Ser Arg Ser Pro Ser Ser Trp Leu Lys Arg Leu Ile
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Ser Ser Pro Trp Glu Leu Glu Val Leu Gln Val Pro Cys Gly Glu Gln
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Leu Leu Arg Arg Arg
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<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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1020

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1130

<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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20 25 30
Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
35 40 45
Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
50 55 60
Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
65 70 75 80
Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
85 90 95
Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
100 105 110
Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
115 120 125
Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
130 135 140
Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
145 150 155 160
Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
165 170 175
Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
180 185 190
Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
195 200 205
Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
210 215 220
Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
225 230 235 240
Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
245 250 255
Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
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Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
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Met Met Glu Leu
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<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

<400> 6173

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240
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<210> 6174

<211> 299
 <212> PRT
 <213> Homo sapiens

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 Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
 35 40 45
 Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
 50 55 60
 Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
 65 70 75 80
 Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
 85 90 95
 Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
 100 105 110
 Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
 115 120 125
 Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
 130 135 140
 Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
 145 150 155 160
 Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
 165 170 175
 Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
 180 185 190
 Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
 195 200 205
 Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
 210 215 220
 Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
 225 230 235 240
 Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
 245 250 255
 Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
 260 265 270
 Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
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<210> 6175
 <211> 349
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 6176
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 6176
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 35 40 45
 Asp Ile Lys Arg Leu Pro Trp Leu Asn Arg Ser Gln Thr Val Val Glu
 50 55 60
 Glu Tyr Leu Ala Phe Leu Gly Asn Leu Val Ser Ala Gln Thr Val Phe
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 Leu Arg Pro Cys Leu Ser Met Ile Ala Ser
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<210> 6177
 <211> 1536
 <212> DNA
 <213> Homo sapiens

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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
			35				40					45			
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
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Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65				70				75						80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90						95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
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Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val


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Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser
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Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn
      180              185              190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu
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Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala
      210              215              220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu
225              230              235              240
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr
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Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn
      260              265              270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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2280

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 2820
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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35				40						45			
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50				55						60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
	65			70					75					80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85					90					95		
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
			100					105					110		
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115				120					125				
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130				135						140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
	145			150					155					160	
Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170					175		
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180					185					190			
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
210	215	220
Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		240
245	250	255
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
260	265	270
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		
325	330	335
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
340	345	350
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
355	360	365
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		
450	455	460
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
500	505	510
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		
515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

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625          630          635          640
Asn Gly Glu Glu Leu His Gly Gly Lys Arg Val Met Glu Cys Leu Lys
          645          650          655
Lys Ala Leu Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val
          660          665          670
Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys
          675          680          685
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys
          690          695          700
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln
705          710          715          720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg
          725          730          735
Glu Ser Pro Glu Ser Glu Gly Pro Ile Tyr Glu Gly Leu Ile Leu
          740          745          750

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<210> 6181
 <211> 1135
 <212> DNA
 <213> Homo sapiens

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<400> 6181
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120
cccaccacgc cctattttctc cggggacgca cagaaacatg atgtggaagt gctggaacgg
180
aacttccaga ccactctgtg tgagtttgag accctctaca aagctttctc aaactgcagc
240
ctcccgaag gatggaat gaacagcacc ccagcgggg agtggttcac cttttacttg
300
gtcaatcagg gggtttgtgt tcccaggaac ttaggaagt gccacggac gtaccgcttg
360
ctcggaagcc ttcggacctg tattgggaac aatgtttttg ggaacgcgtg catctctgtg
420
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480
catttaggtc tgaaaactcc aaatggctgt gagctggtgg tggggggaga gcccagtg
540
tgggcagaag ggcgtgcct tctctttgat gactctttcc tgcagtctgc gttccatgaa
600
ggttcagcag aggatggccc acgggtggtt ttcattggtg atttgtggca tccaaacgtc
660
gcagcggcgg aacggcaggc tcttgatttc atctttgctc cgggacgatg agagtatttc
720
ccatgctgga gtcggcgaga agggccgagg cggggcctgg gcagactgtg gtccggtcca
780
gtccctaccg gtgtgtttc catgctcaga aacctgcctc agcggaaagc tcttatttgg
840
gattttatat catgtcgggt cctcttttcc cttggttatt gtaaatggaa acttttcggc
900
ttgtatttcc ttagattttt ttttttctt tccaatcatt tgcttcagag actcctttct
960

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ggcctaacag cgcattcctt tgattggtcc ttgagtgacc agagacttag tgcccttgta
 1020
 agtctgtctt ctgttgctac ttgttttttt cagtgtcttg aaatagagta actaaatggg
 1080
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 1135

<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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Arg	Glu	Gln	Gly	Arg	Tyr	Leu	Asn	Ser	Arg	Pro	Ser	Ile	Gln	Lys	Pro
			20					25					30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35				40						45			
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
	50				55					60					
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
65					70				75					80	
Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
			85					90					95		
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100				105						110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
		130			135					140					
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
145					150					155				160	
His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
			165					170						175	
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
		180					185						190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
	210					215					220				
Arg	Gln	Ala	Leu	Asp	Phe	Ile	Phe	Ala	Pro	Gly	Arg				
225					230					235					

<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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 120

aggttgtgtt gcgggggtcg ggtagctgta ggtcttagaa atggcatcaa aggtggcctt
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240
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300
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360
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420
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540
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720
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780
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840
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960
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1020
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1080
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1740

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 2160
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 2520
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 2530

<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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Leu	Gly	Pro	Gly	Pro	Val	His	Gly	Arg	Asp	Pro	Gly	Pro	Gly	Gly	Pro
			20					25				30			
Gly	Met	Gly	Asn	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Phe	Gly	Ser	Gly	Ile
	35						40				45				
Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly
	50				55				60						
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70				75						80	
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90					95		
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
			100				105					110			
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
	115					120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
	130					135				140					
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys


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145          150          155          160
Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser
          165          170          175
Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro
          180          185          190
His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
          195          200          205
Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
          210          215          220
Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
225          230          235          240
Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
          245          250          255
Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
          260          265          270
Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu
          275          280          285
Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala
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Val Ala Thr Thr
305

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<210> 6185
 <211> 1231
 <212> DNA
 <213> Homo sapiens

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<400> 6185
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180
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240
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540
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660
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720
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780

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 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1231

<210> 6186

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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 Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly
 35 40 45
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
 50 55 60
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
 65 70 75 80
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
 85 90 95
 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
 100 105 110
 Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser
 115 120 125
 Thr Arg Leu Lys Thr
 130

<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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 180

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 300
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 420
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 540
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 720
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 780
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 909

<210> 6188

<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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 20 25 30
 Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Gly Leu Glu Val
 35 40 45
 Phe Tyr Pro Glu Leu Gly Asn Ile Gly Cys Lys Val Val Pro Asp Cys
 50 55 60
 Asn Asn Tyr Arg Gln Lys Ile Thr Ser Trp Met Glu Pro Ile Val Lys
 65 70 75 80
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<211> 576

<212> PRT

<213> Homo sapiens

<400> 6190

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Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys
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Tyr Arg Arg Val Pro Asn Ser Asn Pro Pro Glu Tyr Glu Phe Leu Trp		
420	425	430
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465	470	475
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485	490	495
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Leu Thr Trp Asp Glu Glu Gly Asp Phe Gly Asp Pro Trp Ser Arg Ile		
515	520	525
Pro Phe Thr Phe Trp Ala Arg Tyr His Gln Asn Ala Arg Ser Arg Phe		
530	535	540
Pro Gln Thr Phe Ala Gly Pro Ile Ile Gly Pro Gly Gly Thr Ala Ser		
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 <211> 3021
 <212> DNA
 <213> Homo sapiens

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			20					25					30		
Asp	Asp	Thr	His	Tyr	Phe	Val	Met	Thr	Ala	Lys	Lys	Gln	Cys	Leu	Leu
		35					40					45			
Arg	Leu	Gly	Val	Leu	Arg	Gln	Asp	Trp	Pro	Asp	Thr	Asn	Arg	Leu	Leu
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Gly	Ser	Ala	Asn	Val	Val	Thr	Glu	Ala	Leu	Gln	Arg	Phe	Thr	Arg	Ala
65				70					75					80	
Ala	Ala	Asp	Phe	Ala	Thr	His	Gly	Lys	Leu	Gly	Lys	Leu	Glu	Phe	Ala
			85					90					95		
Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
		100					105					110			
Met	Met	Arg	Ala	Glu	Ser	Ser	Ala	Arg	Val	Gln	Glu	Lys	His	Gly	Ala
	115					120					125				
Arg	Leu	Leu	Leu	Gly	Leu	Val	Gly	Asp	Cys	Leu	Val	Glu	Pro	Phe	Trp
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Pro	Leu	Gly	Thr	Gly	Val	Ala	Arg	Gly	Phe	Leu	Ala	Ala	Phe	Asp	Ala

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Glu Asn Met His Arg Asn Val Ala Gln Tyr Gly Leu Asp Pro Ala Thr
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Arg Tyr Pro Asn Leu Asn Leu Arg Ala Val Thr Pro Asn Gln Val Arg
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Asp Leu Tyr Asp Val Leu Ala Lys Glu Pro Val Gln Arg Asn Asn Asp
225          230          235          240
Lys Thr Asp Thr Gly Met Pro Ala Thr Gly Ser Ala Gly Thr Gln Glu
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Glu Leu Leu Arg Trp Cys Gln Glu Gln Thr Ala Gly Tyr Pro Gly Val
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His Val Ser Asp Leu Ser Ser Ser Trp Ala Asp Gly Leu Ala Leu Cys
          275          280          285
Ala Leu Val Tyr Arg Leu Gln Pro Gly Leu Leu Glu Pro Ser Glu Leu
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Gln Gly Leu Gly Ala Leu Glu Ala Thr Ala Trp Ala Leu Lys Val Ala
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Ala Gly Ser Asp Pro Leu Gly Leu Ile Ala Tyr Leu Ser His Phe His
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Ser Ala Phe Lys Ser Met Ala His Ser Pro Gly Pro Val Ser Gln Ala
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          405          410          415
Ser Thr Glu Val Pro Pro Asp Pro Glu Pro Gly Val Pro Leu Thr Pro
          420          425          430
Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys
          435          440          445
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Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp
465          470          475          480
Pro Gly Gly Tyr Glu Gln His Pro Gly Asp Gly His Phe Tyr Cys Leu
          485          490          495
Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly
          500          505          510
Pro Glu Ser Pro Glu Leu Pro Thr Pro Ser Glu Asn Ser Met Pro Pro
          515          520          525
Gly Leu Ser Thr Pro Thr Ala Ser Gln Glu Gly Ala Gly Pro Val Pro
          530          535          540
Asp Pro Ser Gln Pro Thr Arg Arg Gln Ile Arg Leu Ser Ser Pro Glu
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<211> 2893
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<213> Homo sapiens
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<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
		35					40					45			
Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
	50					55					60				
Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
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Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
			100					105					110		
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<210> 6196
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 6196
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 35 40 45
 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
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 His Arg Thr Gly Trp
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<212> DNA

<213> Homo sapiens

<400> 6197

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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly
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Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln
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Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val
      65             70             75             80
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys
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<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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		20						25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
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Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
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Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
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Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
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 <212> DNA
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<210> 6202
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6202
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 Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
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 Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
 65 70 75 80
 Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
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<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
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Ala	Arg	Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Thr	Glu	Trp	Ala	Arg
	50				55					60					
Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
65				70					75					80	
Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85					90					95		
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
			100					105					110		
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Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
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245 250 255
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 260 265 270
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 275 280 285
 Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp
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 Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala
 305 310 315 320
 Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser
 325 330 335
 Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala
 340 345 350
 Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp
 355 360 365
 Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn
 370 375 380
 Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp
 385 390 395 400
 Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser
 405 410 415
 Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg
 420 425 430
 Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys
 435 440 445
 Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp
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 Tyr Val Glu Ala Ile Gln
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<210> 6205

<211> 926

<212> DNA

<213> Homo sapiens

<400> 6205

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 <213> Homo sapiens

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 35 40 45
 Thr Ser Ala Lys Leu Asn His Gln Val Ser Glu Val Phe Asn Thr Val
 50 55 60
 Ala Gln Glu Leu Leu Gln Arg Ser Asp Glu Glu Gly Gln Ala Leu Xaa
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 Gly Glu Asp Thr Pro Cys Leu Gly His Gly Gln Leu
 85 90

<210> 6207
 <211> 1384
 <212> DNA
 <213> Homo sapiens

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<210> 6208

<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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 35 40 45
 Ser Ala Ala Thr Val Arg Glu Ala Gln Gly Leu Met Ala Gly Gly
 50 55 60
 Phe Leu Cys Phe Ser Leu Ala Phe Xaa Ala Gln Val Gln Val Val Phe
 65 70 75 80
 Trp Arg Leu His Ser Pro Thr Gln Val Glu Asp Ala Met Leu Asp Thr

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Tyr Asp Leu Val Tyr Glu Gln Ala Met Lys Gly Thr Ser His Val Arg
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Arg Gln Glu Leu Ala Ala Ile Gln Asp Val Phe Leu Cys Cys Gly Lys
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Lys Ser Pro Phe Ser Arg Leu Gly Ser Thr Glu Ala Asp Leu Cys Gln
      130      135      140
Gly Glu Glu Ala Ala Arg Glu Asp Cys Leu Gln Gly Ile Arg Ser Phe
145      150      155      160
Leu Arg Thr His Gln Gln Val Ala Ser Ser Leu Thr Ser Ile Gly Leu
      165      170      175
Ala Leu Thr Val Ser Ala Leu Leu Phe Ser Ser Phe Leu Trp Phe Ala
      180      185      190
Ile Arg Cys Gly Cys Ser Leu Asp Arg Lys Gly Lys Tyr Thr Leu Thr
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Pro Arg Ala Cys Gly Arg Gln Pro Gln Glu Pro Ser Leu Leu Arg Cys
      210      215      220
Ser Gln Gly Gly Pro Thr His Cys Leu His Ser Glu Ala Val Ala Ile
225      230      235      240
Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp Leu Gln Glu Ser Asp
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Ser Asp
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<210> 6209

<211> 2269

<212> DNA

<213> Homo sapiens

<400> 6209

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<210> 6210

<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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Ser Pro Ser Leu Arg Gly Thr His Leu Leu Phe Leu Pro Gln Ala Asp
35 40 45
Val Val Asp Glu Ala Ile Asp Ser Leu Ala Arg Thr Lys Gly Val Met
50 55 60
Lys Pro Pro Cys Ser Glu Gly Ser Pro Trp Arg Cys Pro His Phe Thr
65 70 75 80
Cys Trp Val Leu Gln Ala Arg Lys Pro Gly Ser Gly Gly Thr Arg Glu
85 90 95
Arg Gln Ala Cys Val Trp Thr Ser Ala Gly Ala Ala Ala Leu Arg Leu
100 105 110
Ala Arg Glu Arg Gln Arg Trp Val Phe Arg Phe His Ala Tyr Val Trp
115 120 125
Ala His Ser Gln His Gly Arg Val Ser Ala Val Leu Val Leu Thr Leu
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Trp Pro Gln Pro Ser
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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2160

aaa

2163

<210> 6212

<211> 209

<212> PRT

<213> Homo sapiens

<400> 6212

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35 40 45
Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile
50 55 60
Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn
65 70 75 80
Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu
85 90 95
Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Val Ser Ala Leu Ala
100 105 110
Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr
115 120 125
Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser
130 135 140
Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro
145 150 155 160
Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His
165 170 175
Lys Lys Arg Lys Asn Lys Asn Arg His Ser Pro Ser Gly Met Phe Asp
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Tyr Asp Phe Glu Ile Asp Leu Lys Leu Asn Lys Lys Pro Arg Ala Asp
195 200 205
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<210> 6213

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 6213

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<210> 6214

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6214

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 35 40 45
 Pro Pro Pro Pro Pro Thr Pro Pro Pro Thr Cys Ile Ala Gln Ile Gln
 50 55 60
 Val Met Met Glu Gln Ile Arg Pro Trp His Ser Arg Met Lys Arg Arg
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 Pro Leu Pro Thr Asp
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<210> 6215
 <211> 651
 <212> DNA
 <213> Homo sapiens

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<210> 6216
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 6216
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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<210> 6217
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 <212> DNA
 <213> Homo sapiens

<400> 6217

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<210> 6218

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
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 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
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 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
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 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
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<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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 Leu Ile Gln Asp Gln Asn Ala Gln Thr Arg Trp Lys Gln Gly Arg Tyr
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 Glu Arg Ile Leu Thr Arg Ala Lys Ser Tyr Glu Cys Ser Glu Cys Gly

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Gln Arg Ser Ala Leu Thr Val His Lys Gln Cys His Leu Gln Asn Lys
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Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Tyr
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Leu Val Glu His Lys Arg Ile His Thr Lys Glu Lys Pro Tyr Lys Cys
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Ser Lys Cys Glu Lys Thr Phe Ser Gln Asn Ser Thr Leu Ile Arg His
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Gln Val Ile His Ser Gly Glu Lys Arg His Lys Cys Leu Glu Cys Gly
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<212> DNA

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<400> 6223

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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			20					25					30		
Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
		35					40					45			
Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
		50				55					60				
Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
65					70					75				80	
Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
			85						90					95	
Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
			100						105					110	
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
		115					120					125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
		130				135					140				
Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His
145					150					155				160	
Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
			165						170					175	
Met	Asp	Ser	Thr	Phe	Leu	Asn	Val	Ala	Glu	Ala	Gln	Cys	Ile	Ala	Asn
			180						185					190	
Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
		195					200					205			
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
		210				215						220			
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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245

<210> 6227
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 6227
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 180
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 360
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 420
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 480
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 660
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 720
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 830

<210> 6228
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 6228
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 20 25 30
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 35 40 45
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
 50 55 60
 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
 65 70 75 80
 Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

5410

										85				90				95			
Pro	Val	Asp	Ser	Phe	Phe	Ser	Leu	Leu	Thr	Ser	Glu	Arg	Val	Ala	Lys						
				100				105				110									
Gln	Phe	Pro	Val	Met	Thr	Glu	Ala	Ile	Thr	Gln	Ile	Arg	Ala	Lys	Gly						
				115				120				125									
Leu	Gln	Thr	Ala	Val	Leu	Ser	Asn	Asn	Phe	Tyr	Leu	Pro	Asn	Gln	Lys						
				130				135				140									
Ser	Phe	Leu	Pro	Leu	Asp	Arg	Lys	Gln	Phe	Asp	Val	Ile	Val	Glu	Ser						
145				150				155				160									
Cys	Met	Glu	Gly	Ile	Cys	Lys	Pro	Asp	Pro	Arg	Ile	Tyr	Lys	Leu	Cys						
				165				170				175									
Leu	Glu	Gln	Leu	Gly	Leu	Gln	Pro	Ser	Glu	Ser	Ile	Phe	Leu	Asp	Asp						
				180				185				190									
Leu	Gly	Thr	Asn	Leu	Lys	Glu	Ala	Ala	Arg	Leu	Gly	Ile	His	Thr	Ile						
				195				200				205									
Lys	Val	Asn	Asp	Pro	Glu	Thr	Ala	Val	Lys	Glu	Leu	Glu	Ala	Leu	Leu						
				210				215				220									
Gly	Phe	Thr	Leu	Arg	Val	Gly	Val	Pro	Asn	Thr	Arg	Pro	Val	Lys	Lys						
225				230				235				240									
Thr	Met	Glu	Ile	Pro	Lys	Asp	Ser	Leu	Gln	Lys	Tyr	Leu	Lys	Asp	Leu						
				245				250				255									
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<210> 6229
<211> 3105
<212> DNA
<213> Homo sapiens
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240
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300
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420
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540
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720

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<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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		20						25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
		35				40					45				
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
	50				55					60					
Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
65				70					75					80	
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85					90					95		
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
			100				105						110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
	115					120						125			
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130				135					140					
Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
145					150				155					160	
Pro	Gly	Leu	Leu	Ala	Val	Gln	Gly	Leu	Pro	Glu	Gly	Leu	Ala	Phe	Arg

5414

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  610              615              620
Lys Ile Leu Glu Ala Ser Asn Ser Ile Gln Phe Val Ile Lys Arg Pro
  625              630              635              640
Glu Leu Leu Thr Glu Gly Val Lys Glu Pro Ile Val Asp Ser Gln Glu
      645              650              655
Arg Asp Ser Gly Asp Pro Leu Val Asp Glu Ser Leu Lys Arg Gln Gly
      660              665              670
Phe Gln Glu Asn Tyr Asp Ala Arg Leu Ser Arg Ile Asp Ile Ala Asn
      675              680              685
Thr Leu Arg Glu Gln Val Gln Asp Leu Phe Asn Lys Lys Tyr Gly Glu
      690              695              700
Ala Leu Gly Ile Lys Tyr Pro Val Gln Val Pro Tyr Lys Arg Ile Lys
  705              710              715              720
Ser Asn Pro Gly Ser Val Ile Ile Glu Gly Leu Pro Pro Gly Ile Pro
      725              730              735
Phe Arg Lys Pro Cys Thr Phe Gly Ser Gln Asn Leu Glu Arg Ile Leu
      740              745              750
Ala Val Ala Asp Lys Ile Lys Phe Thr Val Thr Arg Pro Phe Gln Gly
      755              760              765
Leu Ile Pro Lys Pro Asp Glu Asp Asp Ala Asn Arg Leu Gly Glu Lys
      770              775              780
Val Ile Leu Arg Glu Gln Val Lys Glu Leu Phe Asn Glu Lys Tyr Gly
  785              790              795              800
Glu Ala Leu Gly Leu Asn Arg Pro Val Leu Val Pro Tyr Lys Leu Ile
      805              810              815
Arg Asp Ser Pro Asp Ala Val Glu Val Thr Gly Leu Pro Asp Asp Ile
      820              825              830
Pro Phe Arg Asn Pro Asn Thr Tyr Asp Ile His Arg Leu Glu Lys Ile
      835              840              845
Leu Lys Ala Arg Glu His Val Arg Met Val Ile Ile Asn Gln Leu Gln
      850              855              860
Pro Phe Ala Glu Ile Cys Asn Asp Ala Lys Val Pro Ala Lys Asp Ser
  865              870              875              880
Ser Ile Pro Lys Arg Lys Arg Lys Arg Val Ser Glu Gly Asn Ser Val
      885              890              895
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Asn Pro Asp Ser
      900              905              910
Val Ala Ser Ala Asn Gln Ile Ser Leu Val Gln Trp Pro Met Tyr Met
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Val Asp Tyr Ala Gly Leu Asn Val Gln Leu Pro Gly Pro Leu Asn Tyr
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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120

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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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Gly	Asp	Arg	Thr	Arg	Pro	Cys	Leu	Phe	Lys	Lys	Lys	Lys	Lys	Ala	Gln
			20					25						30	
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50				55					60					
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Asn	His	Ser	Ser	
65					70				75					80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85					90						95	
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100					105						110		
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
		115				120						125			
Ile	Pro	Phe	Pro	Phe	Pro	Pro	Pro	Ser	Asn						
	130					135									

<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40				45				
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
		50				55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70						75				80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
				85					90					95	
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105						110	
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
		130				135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
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Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
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Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
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 Pro Asp Leu Pro Leu Asp
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 230
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<210> 6235
 <211> 3427
 <212> DNA
 <213> Homo sapiens

<400> 6235
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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Ala	Arg	Asp	Pro	Val	Arg	Asp	Phe	Pro	Phe	Glu	Leu	Ile	Pro	Glu	Pro
		20					25						30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
		35				40						45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65					70					75				80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
			85					90						95	
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
		100						105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
	115						120					125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
	130				135						140				
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
145				150						155				160	
Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
		165							170					175	
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
		180					185					190			
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
	195						200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
	210					215					220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

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225          230          235          240
Pro Gly Lys Ile Pro Lys Thr Leu Val Pro His Tyr Cys Glu Leu Val
          245          250          255
Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe Leu Gln Asn
          260          265          270
Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn
          275          280          285
Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys
          290          295          300
Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe
305          310          315          320
Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly
          325          330          335
Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe
          340          345          350
Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys
          355          360          365
Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln
          370          375          380
Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln
385          390          395          400
Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile
          405          410          415
Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro Lys Leu Asn
          420          425          430
Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln
          435          440          445
Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu
          450          455          460
Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu
465          470          475          480
Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg
          485          490          495
Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met
          500          505          510
Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val
          515          520          525
Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser
          530          535          540
Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu
545          550          555          560
Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly
          565          570          575
Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu
          580          585          590
Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr
          595          600          605
Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro
610          615          620
Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln
625          630          635          640
Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp
          645          650          655
Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu

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660 665 670
 Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly Gln Val Ser Arg Ala Ser
 675 680 685
 Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp
 690 695 700
 Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu
 705 710 715 720
 Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu
 725 730 735
 Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala
 740 745 750
 Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly
 755 760 765
 Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala
 770 775 780
 Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Arg Glu Met Glu Ala
 785 790 795 800
 Lys Arg Ala Glu Arg Lys Val Ala Lys Gly Pro Met Lys Leu Gly Ala
 805 810 815
 Arg Lys Leu Asp
 820

<210> 6237
 <211> 494
 <212> DNA
 <213> Homo sapiens

<400> 6237
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 360
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<210> 6238
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 6238
 Met Leu Phe Arg Asn Arg Phe Leu Leu Leu Leu Ala Leu Ala Ala Leu

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Leu Ala Phe Val Ser Leu Ser Leu Gln Phe Phe His Leu Ile Pro Val
      20             25             30
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met
      35             40             45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala
      50             55             60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly
      65             70             75             80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg
      85             90             95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro
      100            105            110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys
      115            120            125
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly
      130            135            140

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<210> 6239
 <211> 911
 <212> DNA
 <213> Homo sapiens

<400> 6239
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911

<210> 6240
<211> 235
<212> PRT
<213> Homo sapiens

<400> 6240
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35 40 45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
50 55 60
Gly Pro Leu Gly Phe Ser Phe Phe Asn Met Leu Phe Val Phe Arg
65 70 75 80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
85 90 95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
100 105 110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
115 120 125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
130 135 140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
145 150 155 160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
165 170 175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
180 185 190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
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Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
210 215 220
Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
225 230 235

<210> 6241
<211> 1515
<212> DNA
<213> Homo sapiens

<400> 6241
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<210> 6242

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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5

10

15

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      35      40      45
Gly Glu Pro Pro Pro Pro Glu Leu Ala Leu Leu Pro Pro Pro Pro
      50      55      60
Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
65      70      75      80
Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
      85      90      95
Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Asp Thr Phe Glu Tyr
      100      105      110
Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
      115      120      125
Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
      130      135      140
Ser Ile Cys Lys Lys Lys Glu Asn Arg His Phe Ile Val Pro Ala Ser
145      150      155      160
Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
      165      170      175
Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
      180      185      190
Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
      195      200      205
His Cys Leu Asp Glu Gly Thr Val Arg Ser Met Val Thr Glu Glu Phe
      210      215      220
Asn Gly Ser Asp Trp Glu Lys Ala Met Lys Glu His Lys Thr Ile Lys
225      230      235      240
Asn Met Ser Lys Glu
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<210> 6243

<211> 326

<212> DNA

<213> Homo sapiens

<400> 6243

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240
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ctgtagggat gcattcctgg agagtg
326

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<210> 6244

<211> 104

<212> PRT

<213> Homo sapiens

<400> 6244

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 20           25           30
Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
 35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
 50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
 65           70           75           80
Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
 85           90           95
Phe Leu Ser Phe Ser Pro Trp Arg
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<210> 6245

<211> 6609

<212> DNA

<213> Homo sapiens

<400> 6245

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Arg Ser Val Leu Gly Asp Glu Lys Ser Gln Phe Glu Cys Arg Val Arg						
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Glu Leu Gln Arg Met Leu Asp Thr Glu Lys Gln Ser Arg Ala Arg Ala						
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Glu Thr Glu Arg Glu Leu Lys Gln Arg Leu Leu Glu Glu Gln Ala Lys						
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Leu Gln Gln Gln Met Asp Leu Gln Lys Asn His Ile Phe Arg Leu Thr						
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Gln Gly Leu Gln Glu Ala Leu Asp Arg Ala Asp Leu Leu Lys Thr Glu						
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Arg Ser Asp Leu Glu Tyr Gln Leu Glu Asn Ile Gln Val Leu Tyr Ser						
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His Glu Lys Val Lys Met Glu Gly Thr Ile Ser Gln Gln Thr Lys Leu						
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Val Pro Leu Gln Tyr Asn Glu Leu Lys Leu Ala Leu Glu Lys Glu Lys						
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Leu Arg Ser Ala Arg Glu Glu Ala Ala His Arg Lys Ala Thr Asp His						
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 Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser
 65 70 75 80
 Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu
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 35 40 45
 Ser Arg Ala Val Leu Lys Pro Gly Arg Gln Gly Pro Pro Ile Pro Thr
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 Ile Leu Leu Ser Pro Ser Pro Pro Trp Arg Thr Leu Ala Arg Val Tyr
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 <212> DNA
 <213> Homo sapiens

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<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

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Glu	Ala	Thr	Leu	Gly	Ser	Gly	Asn	Leu	Arg	Gln	Ala	Val	Met	Leu	Pro
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<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

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<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256

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			20					25					30		
His	Pro	Arg	Val	Val	Glu	Leu	Pro	Lys	Thr	Asp	Glu	Gly	Leu	Gly	Phe
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Asn	Ile	Met	Gly	Gly	Lys	Glu	Gln	Asn	Ser	Pro	Ile	Tyr	Ile	Ser	Arg
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Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
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Asp	Gln	Leu	Leu	Ser	Val	Asn	Gly	Val	Ser	Val	Glu	Gly	Glu	Gln	His
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Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
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Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser	
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<210> 6257

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 6257

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<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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Phe	Gln	Ala	Leu	Gln	Arg	Leu	His	Met	Thr	Ile	Phe	Ser	Gln	Ser	Val
			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
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Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
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Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
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Arg	Glu	Arg	Ser	Pro	Glu	Val	Leu	Ser	Gly	Gly	Glu	Asp	Gly	Ala	Val
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Lys	Ala	Gln	Val	Pro	Gly	Ser	Ser	Pro	Gly	Leu	Leu	Ser	Leu	Ser	Leu
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<210> 6259

<211> 384

<212> DNA

<213> Homo sapiens

<400> 6259

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<212> PRT

<213> Homo sapiens

<400> 6260

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			20					25				30			
Gln	Lys	Asn	Glu	Lys	Ile	Lys	Tyr	Ser	Arg	Phe	Ala	Ala	Thr	Asn	Thr
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Gln	Val	Asn	Ser	Phe	Ser	Asp	Leu	Lys	Ala	Ser	Thr	Leu	Val	His	Lys
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Pro	Gln	Ser	Asp	Phe	Thr	Asn	Asp	Ala	Leu	Ser	Pro	Lys	Phe	Asn	Leu
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<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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Ala	Ala	Gln	Gln	Leu	Pro	Ser	Leu	Leu	Lys	Glu	Arg	Glu	Phe	His	Leu
			50			55				60					
Gly	Thr	Leu	Asn	Lys	Val	Phe	Ala	Ser	Gln	Trp	Leu	Asn	His	Arg	Gln
65					70					75					80
Val	Val	Cys	Gly	Thr	Lys	Cys	Asn	Thr	Leu	Phe	Val	Val	Asp	Val	Gln
				85					90					95	
Thr	Ser	Gln	Ile	Thr	Lys	Ile	Pro	Ile	Leu	Lys	Asp	Arg	Glu	Pro	Gly
			100					105					110		
Gly	Val	Thr	Gln	Gln	Gly	Cys	Gly	Ile	His	Ala	Ile	Glu	Leu	Asn	Pro
			115				120					125			
Ser	Arg	Thr	Leu	Leu	Ala	Thr	Gly	Gly	Asp	Asn	Pro	Asn	Ser	Leu	Ala
			130			135					140				
Ile	Tyr	Arg	Leu	Pro	Thr	Leu	Asp	Pro	Val	Cys	Val	Gly	Asp	Asp	Gly
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His	Lys	Asp	Trp	Ile	Phe	Ser	Ile	Ala	Trp	Ile	Ser	Asp	Thr	Met	Ala
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Val	Ser	Gly	Ser	Arg	Asp	Gly	Ser	Met	Gly	Leu	Trp	Glu	Val	Thr	Asp
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<211> 2508
<212> DNA
<213> Homo sapiens
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540
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2160

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<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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		20					25					30			
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
	35					40					45				
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50				55					60					
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65				70					75					80	
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
			85					90					95		
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
		100					105					110			
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
	115					120					125				
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130				135					140					
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145				150					155					160	
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165					170					175		
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
		180				185						190			
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
	195					200					205				
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210				215					220					
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225				230					235					240	
Pro	Thr	Ser	Ala	Thr	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu	
			245				250					255			
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
		260				265						270			
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

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290	295	300
Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser		
305	310	315
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp		
325	330	335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys		
340	345	350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala		
355	360	365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His		
370	375	380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys		
385	390	395
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala		
405	410	415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys		
420	425	430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys		
435	440	445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser		
450	455	460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu		
465	470	475
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln		
485	490	495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys		
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Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala		
515	520	525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu		
530	535	540
Gln Ile Arg Lys Glu Gln Glu Glu Glu Arg Glu Ala Ile Arg Leu Ser		
545	550	555
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro		
565	570	575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg		
580	585	590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala		
595	600	605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro		
610	615	620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val		
625	630	635
Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu		
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<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

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Ser Pro Asp	Asp Lys Glu Phe Gln	Ser Val Glu Glu Glu	Met Gln Ser
35	40	45	
Thr Val Arg	Glu His Arg Asp Gly	Gly His Ala Gly	Gly Ile Phe Asn
50	55	60	
Arg Tyr Asn	Ile Leu Lys Ile Gln	Lys Val Cys Asn Lys	Lys Leu Trp
65	70	75	80
Glu Arg Tyr	Thr His Arg Arg Lys	Glu Val Ser Glu Glu	Asn His Asn
85	90	95	
His Ala Asn	Glu Arg Met Leu Phe	His Gly Ser Pro Phe	Val Asn Ala
100	105	110	
Ile Ile His	Lys Gly Phe Asp Glu	Arg His Ala Tyr Ile	Gly Gly Met
115	120	125	
Phe Gly Ala	Gly Ile Tyr Phe Ala	Glu Asn Ser Ser Lys	Ser Asn Gln
130	135	140	
Tyr Val Tyr	Gly Ile Gly Gly Gly	Thr Gly Cys Pro Val	His Lys Asp
145	150	155	160
Arg Ser Cys	Tyr Ile Cys His Arg	Gln Leu Leu Phe Cys	Arg Val Thr
165	170	175	
Leu Gly Lys	Ser Phe Leu Gln Phe	Ser Ala Met Lys Met	Ala His Ser
180	185	190	
Pro Pro Gly	His His Ser Val Thr	Gly Arg Pro Ser Val	Asn Gly Leu
195	200	205	
Ala Leu Ala	Glu Tyr Val Ile Tyr	Arg Gly Glu Gln Ala	Tyr Pro Glu
210	215	220	
Tyr Leu Ile	Thr Tyr Gln Ile Met	Arg Pro Glu Gly Met	Val Asp Gly
225	230	235	240

<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

atccatgacg aggaggtcct gcggctgctc tatgaggagg ccaagggcaa cgtgctggct
240

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328

<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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 35 40 45
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 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln
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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270

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Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
      35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
      50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
      65           70           75           80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
      85           90           95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
      100          105          110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
      115          120          125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
      130          135          140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
      145          150          155          160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
      165          170          175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
      180          185          190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
      195          200          205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
      210          215          220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
      225          230          235          240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
      245          250          255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
      260          265          270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
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Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
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Leu Val Asn
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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271

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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
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Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
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Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
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<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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 <212> PRT
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<400> 6274
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<212> PRT

<213> Homo sapiens

<400> 6276

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<210> 6277

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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			20				25						30		
Asn	Arg	Lys	His	Ile	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro	Thr
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Thr	Ser	Gln	His	Pro	Pro	Ser	Leu	Ser	Pro	Lys	Pro	Pro	Thr	Arg	Ser
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Pro	Ile	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln	Ala
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			245					250						255	
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		260						265					270		
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<210> 6279

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<212> DNA

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<212> PRT

<213> Homo sapiens

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Ser Leu Ser Leu Glu Ile Leu Gln Ile Ile Lys Glu Ser Gln Gln Gln
 50          55          60
His Gly Leu Arg His Gly Asp Phe Gln Arg Tyr Arg Gly Tyr Cys Ser
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Arg Arg Gln Arg Arg Leu Arg Lys Thr Leu Asn Phe Lys Met Gly Asn
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Arg His Lys Phe Thr Gly Lys Lys Val Thr Glu Glu Leu Leu Thr Asp
100          105          110
Asn Arg Tyr Leu Leu Val Leu Met Asp Ala Glu Arg Ala Trp Ser
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Tyr Ala Met Gln Leu Lys Gln Glu Ala Asn Thr Glu Pro Arg Lys Arg
130          135          140
Phe His Leu Leu Ser Arg Leu Arg Lys Ala Val Lys His Ala Glu Glu
145          150          155          160
Leu Glu Arg Leu Cys Lys Ser Asn Arg Val Asp Ala Lys Thr Lys Leu
165          170          175
Glu Ala Gln Ala Tyr Thr Ala Tyr Leu Ser Gly Met Leu Arg Phe Glu
180          185          190
His Gln Glu Trp Lys Ala Ala Ile Glu Ala Phe Asn Lys Cys Lys Thr
195          200          205
Ile Tyr Glu Lys Leu Ala Ser Ala Phe Thr Glu Glu Gln Ala Val Leu
210          215          220
Tyr Asn Gln Arg Val Glu Glu Ile Ser Pro Asn Ile Arg Tyr Cys Ala
225          230          235          240
Tyr Asn Ile Gly Asp Gln Ser Ala Ile Asn Glu Leu Met Gln Met Arg
245          250          255
Leu Arg Ser Gly Gly Thr Glu Gly Leu Leu Ala Glu Lys Leu Glu Ala
260          265          270
Leu Ile Thr Gln Thr Arg Ala Lys Gln Ala Ala Thr Met Ser Glu Val
275          280          285
Glu Trp Arg Gly Arg Thr Val Pro Val Lys Ile Asp Lys Val Arg Ile
290          295          300
Phe Leu Leu Gly Leu Ala Asp Asn Glu Ala Ala Ile Val Gln Ala Glu
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Ser Glu Glu Thr Lys Glu Arg Leu Phe Glu Ser Met Leu Ser Glu Cys
325          330          335
Arg Asp Ala Ile Gln Val Val Arg Glu Glu Leu Lys Pro Asp Gln Lys

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 Lys Arg Asn Glu Asn Met Ala Lys Gly Leu His Arg Ala Leu Leu Gln
 385 390 395 400
 Gln Gln Pro Glu Asp Asp Ser Lys Arg Ser Pro Arg Pro Gln Asp Leu
 405 410 415
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 420 425 430
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 Lys Thr Leu Val Phe Lys Ala Tyr Arg Cys Phe Phe Ile Ala Gln Ser
 450 455 460
 Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr Asp Arg
 465 470 475 480
 Val Leu Lys Tyr Ala Asn Glu Val Asn Ser Asp Ala Gly Ala Phe Lys
 485 490 495
 Asn Ser Leu Lys Asp Leu Pro Asp Val Gln Glu Leu Ile Thr Gln Val
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 Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ala Ile Leu Asp Ala Asn
 515 520 525
 Asp Ala His Gln Thr Glu Thr Ser Ser Ser Gln Val Lys Asp Asn Lys
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 Pro Leu Val Glu Arg Phe Glu Thr Phe Cys Leu Asp Pro Ser Leu Val
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 Thr Lys Gln Ala Asn Leu Val His Phe Pro Pro Gly Phe Gln Pro Ile
 565 570 575
 Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe
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<210> 6281

<211> 741

<212> DNA

<213> Homo sapiens

<400> 6281

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<210> 6282

<211> 162

<212> PRT

<213> Homo sapiens

<400> 6282

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			20				25					30			
Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
		35				40					45				
Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
	50				55				60						
Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
65					70				75					80	
Met	Gly	Lys	Leu	Glu	Thr	Asp	Phe	Lys	Arg	Ser	Arg	Ile	Ala	Tyr	Ser
			85					90					95		
Asp	Glu	Val	Arg	Asn	Glu	Leu	Leu	Gly	Asp	Asp	Gly	Asn	Ser	Ser	Glu
			100					105					110		
Asn	Gln	Arg	Ala	His	Leu	Leu	Asp	Asn	Thr	Glu	Arg	Leu	Glu	Arg	Ser
		115				120						125			
Ser	Arg	Arg	Leu	Glu	Ala	Gly	Tyr	Gln	Ile	Ala	Val	Glu	Thr	Gly	Glu
	130					135					140				
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<210> 6283

<211> 2312

<212> DNA

<213> Homo sapiens

<400> 6283

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<210> 6284

<211> 122

<212> PRT

<213> Homo sapiens

<400> 6284

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Ala	Val	Phe	Leu	Leu	Pro	Trp	Ala	Ser	Met	Trp	Leu	Arg	Ser	Leu	Leu
			20					25					30		
Lys	Pro	Ile	His	Val	Phe	Phe	Gly	Ala	Ala	Ile	Leu	Ser	Leu	Ser	Ile
		35					40					45			
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		50				55				60					
Asn	Thr	Thr	Arg	Pro	Tyr	His	Ser	Leu	Pro	Ser	Glu	Ala	Val	Phe	Ala
65					70					75				80	
Asn	Ser	Thr	Gly	Met	Leu	Val	Val	Ala	Phe	Gly	Leu	Leu	Val	Leu	Tyr
			85						90				95		
Ile	Leu	Leu	Ala	Ser	Ser	Trp	Lys	Arg	Pro	Glu	Pro	Gly	Ile	Leu	Thr
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<210> 6285

<211> 2542

<212> DNA

<213> Homo sapiens

<400> 6285

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 2542

<210> 6286
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 6286
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 Ser Pro Trp Ala Ser Trp His Arg Ser
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<210> 6287
 <211> 1674
 <212> DNA
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<211> 269
 <212> PRT
 <213> Homo sapiens

<400> 6288
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 35 40 45
 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
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 Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
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 Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
 100 105 110
 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
 115 120 125
 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
 130 135 140
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 145 150 155 160
 Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
 165 170 175
 Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln Ala Lys Gln Trp Phe Ser
 180 185 190
 Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
 195 200 205
 Asp Ser Phe Val Asn Lys Leu Asp Pro Ser Lys Val Phe Lys Ser Lys
 210 215 220
 Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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 <211> 1321
 <212> DNA
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<210> 6290

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6290

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			20					25						30	
Ser	Pro	Asp	Glu	Gly	Leu	Ile	Glu	Asp	Leu	Thr	Ile	Glu	Asp	Lys	Ala
			35				40					45			
Val	Glu	Gln	Leu	Ala	Glu	Gly	Leu	Leu	Ser	His	Tyr	Leu	Pro	Asp	Leu
			50				55				60				
Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val

65		70		75		80									
Leu	Leu	Asp	Thr	Leu	Glu	Gln	Glu	Ile	Ser	Lys	Phe	Lys	Glu	Cys	His
				85					90					95	
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
		100						105					110		
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
	115					120					125				
Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
	130					135					140				
Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg
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<210> 6291

<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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2700

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2718

<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Pro	Ala	His	Phe	Ser	Asp	Ser	Ala	Gln	Thr	Glu	Ala	Cys	Tyr	His	Met
			20					25					30		
Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
			35				40					45			
Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp
			50				55				60				
Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp
65				70						75				80	
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
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Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp
			100					105					110		
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val
			115				120					125			
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu
			130				135				140				
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			180					185					190		
Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp
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			245						250					255	
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			260					265					270		
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys
			275				280					285			
Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile
			290				295				300				
Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro
305					310					315				320	
Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
			325						330					335	
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro


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Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly
          370          375          380
Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile
385          390          395          400
Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly
          405          410          415
Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
          420          425          430
Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
          435          440          445
Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
          450          455          460
Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
465          470          475          480
Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala
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<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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180
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660
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<210> 6294
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 6294
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 20 25 30
 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys
 35 40 45
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
 130 135 140
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
 165 170 175
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
 210 215 220
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<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

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1860


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305              310              315              320
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Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
              340              345              350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
              355              360              365
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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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120
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472

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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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              20              25              30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
              35              40              45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
50              55              60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65              70              75              80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
              85              90              95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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	115		120		125										
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130		135		140										
Cys	Ala														
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<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Leu	Gln	Leu	Val	Ala	His	Leu	Arg	Ala	Gly	Glu	Arg	Cys	Gly	Gln	Ala
			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
		35					40					45			
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55					60				
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65				70						75				80	
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
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			165						170					175	
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Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
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	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
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 <211> 911
 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

<400> 6302

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 Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
 65 70 75 80
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 Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
 100 105 110
 Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
 115 120 125
 Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
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<212> DNA

<213> Homo sapiens

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 Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
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 Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
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 Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Thr	Trp	Asp	Ser	Thr	Phe	Cys	Ala	Val	Asn	Pro	Lys	Phe	Leu	Ala	Val
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Lys	Thr	Gly	Arg	Ile	Asp	Lys	Ala	Tyr	Pro	Thr	Val	Cys	Gly	His	Thr
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Gly	Pro	Val	Leu	Asp	Ile	Asp	Trp	Cys	Pro	His	Asn	Asp	Gln	Val	Ile
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Tyr	Asp	Pro	Asp	Thr	Ser	Ile	Ile	Tyr	Leu	Cys	Gly	Lys	Gly	Asp	Ser

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 Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro
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 Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala
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<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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Asn Cys Ile Met Gly Val Leu Ser Asn Lys Cys Gly Phe Gln Leu Gln
225              230              235              240
Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met
245              250              255
Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile
260              265              270
Leu Gln Glu Ser Val Lys Glu Lys Val Thr Arg Ile Ile Leu Ala Ala
275              280              285
Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
290              295              300
Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn
305              310              315              320
Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys
325              330              335
Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
340              345              350
Asp Glu Tyr Ser Ser Glu Leu Lys Ser Gly Arg Leu Glu Trp Ser Pro
355              360              365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
370              375              380
Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
385              390              395              400
Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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```

                405                410                415
Tyr Val Arg His Tyr Pro Arg Gly Lys Arg Val Ile Glu Gln Leu Gly
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Gly Lys Gln Leu Val Met Asn His Met His His Glu Asp Gln Gln Val
                435                440                445
Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp
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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<212> PRT

<213> Homo sapiens

<400> 6310

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20                25                30
Leu Gln Glu Ala Arg Pro Leu Gly Leu Leu Val Pro Asp Ala Gly Asp
35                40                45
Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
50                55                60
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<211> 1548
<212> DNA
<213> Homo sapiens

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360
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<210> 6312

<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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Gln	Ile	Lys	Thr	Phe	Leu	Leu	His	Ser	His	Gly	Leu	Ala	His	Val	Trp
			20					25						30	
Leu	Asp	Glu	Tyr	Lys	Glu	Gln	Tyr	Phe	Ser	Leu	Arg	Pro	Asp	Leu	Lys
		35					40					45			
Thr	Lys	Ser	Tyr	Gly	Asn	Ile	Ser	Glu	Arg	Val	Glu	Leu	Arg	Lys	Lys
	50					55					60				
Leu	Gly	Cys	Lys	Ser	Phe	Lys	Trp	Tyr	Leu	Asp	Asn	Val	Tyr	Pro	Glu
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Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	Gln	Gln	Pro	Ile	Phe	Val
			85						90					95	
Asn	Arg	Gly	Pro	Lys	Arg	Pro	Lys	Val	Leu	Gln	Arg	Gly	Arg	Leu	Tyr
			100					105						110	
His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	Gln	Gly	Arg	Pro	Ser	Gln
			115					120					125		
Lys	Gly	Gly	Leu	Val	Val	Leu	Lys	Ala	Cys	Asp	Tyr	Ser	Asp	Pro	Asn
	130					135					140				
Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	Leu	Val	Leu	Asn	Ser	Leu
145					150					155				160	
Leu	Cys	Leu	Asp	Met	Ser	Glu	Thr	Arg	Ser	Ser	Asp	Pro	Pro	Arg	Leu
			165						170					175	
Met	Lys	Cys	His	Gly	Ser	Gly	Gly	Ser	Gln	Gln	Trp	Thr	Phe	Gly	Lys
			180					185					190		
Asn	Asn	Arg	Leu	Tyr	Gln	Val	Ser	Val	Gly	Gln	Cys	Leu	Arg	Ala	Val
			195					200					205		
Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	Met	Ala	Ile	Cys	Asp	Gly
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Ser	Ser	Ser	Gln	Gln	Trp	His	Leu	Glu	Gly						
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<210> 6313

<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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<210> 6314

<211> 175

<212> PRT

<213> Homo sapiens

<400> 6314

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			20					25					30		
His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
			35				40					45			
Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
	50				55					60					
Leu	Lys	Asp	Val	Tyr	Val	Asp	Ser	Lys	Asp	Pro	Val	Ser	Ser	Leu	Gln
65					70					75				80	
Val	Lys	Ala	Ala	Glu	Thr	Cys	Gln	Glu	Pro	Lys	Glu	Phe	Arg	Leu	Pro
			85					90					95		
Lys	Asp	His	His	Phe	Asp	Met	Ile	Asn	Ile	Lys	Ser	Ile	Pro	Lys	Gly
		100						105					110		
Lys	Ile	Ser	Ile	Val	Glu	Ala	Leu	Thr	Leu	Leu	Asn	Asn	His	Lys	Leu
		115					120					125			
Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
	130					135				140					
Glu	Gln	Lys	Asp	Val	Asn	Ser	Leu	Leu	Lys	Tyr	Phe	Val	Thr	Phe	Glu
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 <212> DNA
 <213> Homo sapiens

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 240
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<210> 6316
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 <212> PRT
 <213> Homo sapiens

<400> 6316
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 Gly His Ile Pro Glu Leu Gln Glu Tyr Val Lys Tyr Lys Tyr Ala Met
 35 40 45
 Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu His Glu Ala Val Val
 50 55 60
 Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu Asp Ala Ser Tyr Lys
 65 70 75 80
 Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu Thr Pro Leu Thr Leu
 85 90 95
 Ala Val Lys Ala Gly Leu Val Glu Asn Val Arg Thr Leu Leu Glu Lys
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 Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly Glu Thr Pro
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<210> 6317
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 <212> DNA
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 360
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<210> 6318

<211> 94

<212> PRT

<213> Homo sapiens

<400> 6318

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 20 25 30
 Thr Thr Thr Leu Ser Ser Ala Ser Met Ser Trp Ser Ser Ser Ser
 35 40 45
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Met Gly Ser Ser
 50 55 60
 Gly Thr Phe Thr Ser Pro Glu Cys Arg Cys Leu Tyr Asp Val Lys Pro

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65              70              75              80
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<212> DNA
<213> Homo sapiens
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<210> 6320
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<212> PRT
<213> Homo sapiens
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<400> 6320
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Arg Ser Leu Leu Arg Arg Gly Ala Ser Val Asn Arg Thr Thr Arg Thr
          20          25          30
Asn Ser Thr Pro Leu Arg Ala Ala Cys Phe Asp Gly His Leu Glu Val
          35          40          45
Val Arg Tyr Leu Val Gly Glu His Gln Ala Asp Leu Glu Val Ala Asn
          50          55          60
Arg His Gly His Thr Cys Leu Met Ile Ser Cys Tyr Lys Gly His Arg
65          70          75          80
Glu Ile Ala Arg Tyr Leu Leu Glu Gln Gly Ala Gln Val Asn Arg Arg
          85          90          95
Ser Ala Lys Gly Asn Thr Ala Leu His Asp Cys Ala Glu Ser Gly Ser
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Leu Glu Ile
          115

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<210> 6321
<211> 1442
<212> DNA
<213> Homo sapiens
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<400> 6321
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<210> 6322

<211> 196

<212> PRT

<213> Homo sapiens

<400> 6322

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Met Ser Ser Pro Gly Leu Thr Glu Asn Ser Gln Arg Asp Pro Ser Glu
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      20           25           30
Gln Met Lys Leu Lys Glu Arg Gln Lys Phe Phe Glu Glu Ala Phe Gln
      35           40           45
Gln Asp Met Glu Gln Gln Tyr Leu Ser Thr Gly Tyr Leu Gln Ile Ala
      50           55           60
Glu Arg Arg Glu Pro Ile Gly Ser Met Ser Ser Met Glu Val Asn Val
      65           70           75           80
Asp Met Leu Glu Gln Met Asp Leu Met Asp Ile Ser Asp Gln Glu Ala
      85           90           95
Leu Asp Val Phe Leu Asn Ser Gly Gly Glu Glu Asn Thr Val Leu Ser
      100          105          110
Pro Ala Leu Gly Pro Glu Ser Ser Thr Cys Gln Asn Glu Ile Thr Leu
      115          120          125
Gln Val Pro Asn Pro Ser Glu Leu Arg Ala Lys Pro Pro Ser Ser Ser
      130          135          140
Ser Thr Cys Thr Asp Ser Ala Thr Arg Asp Ile Ser Glu Gly Gly Glu
      145          150          155          160
Ser Pro Val Val Gln Ser Asp Glu Glu Glu Val Gln Val Asp Thr Ala
      165          170          175
Leu Ala Thr Ser His Thr Asp Arg Glu Ala Thr Pro Asp Gly Gly Glu
      180          185          190
Asp Ser Asp Ser
      195

```

What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least 10 contiguous nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.
27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.
28. The method of claim 27, wherein said subject is a human.
29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.
30. The method of claim 29, wherein said subject is a human.
31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.
32. The method of claim 31, wherein said subject is a human.